MODEL OF COMPETITION DOCUMENTATION

PARTNERSHIP FOR INNOVATION

Public procurement

Development of a smart waste management system

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Model of competition documentation for the qualification phase

1. GENERAL INFORMATION ABOUT THE SUBJECT OF THE PROCUREMENT

|  |  |
| --- | --- |
| Title:  | Development of a smart waste management system |
| Reference number: | \_\_/\_\_ |
| Type of procurement subject: | Services |

**Description:**

The development of a smart waste management system is an advanced, technologically sophisticated solution that optimises the collection, processing and disposal of waste. Existing waste management systems often face challenges such as:

1. Inefficient waste collection methods - Many traditional systems do not utilise advanced tracking and data analysis technologies, which can lead to excessive or inadequate waste collection.

2. Lack of transparency - Current systems are often unable to track the movement or processing of waste, making it difficult to analyse and make new decisions.

3. Limited sustainability - Without “smart” technologies, it is difficult to achieve sustainable waste management that minimises the impact on the environment.

4. Insufficient use of data - Data that could improve waste management is often underutilised, i.e., there is no analysis of where the largest amounts of waste come from, whether it is household waste, industrial waste, electronic waste, etc., nor is there an assessment of where recycling or waste reduction can be improved.

The public procurement procedure is organised to establish a partnership for innovation with a single partner[[1]](#footnote-1) for the development of a smart waste management system. The objectives to be achieved through this procurement are:

1. Increasing the efficiency of waste management

 - Develop and implement smart waste collection systems that enable route optimisation, cost reduction and improved operational efficiency.

 - Use technologies such as sensors to monitor container fill levels and adjust collection schedules in real time.

2. Increase the recycling rate

 - Introduce innovative solutions that encourage citizens to properly separate and recycle waste through education and the use of applications that facilitate waste management.

3. Improve sustainability and environmental protection

 - Reduce the adverse impact of waste on the environment through more efficient management and recycling, helping to reduce landfill and emissions of harmful gases.

 - Reduce CO2 emissions by reducing unnecessary lorry journeys.

4. Improve the quality of service for citizens.

 - Provide a more transparent and faster waste collection and management system that is customised to the needs of the municipality.

 - Create an application that allows citizens to: track waste collection schedules, receive recycling information and provide feedback in the form of suggestions, praise or complaints.

5. Better analysis and reporting

 - Advanced analytics enable detailed monitoring of waste volumes and their sources, improving planning and management strategy.

To summarise, the public procurement process within the partnership for innovation aims to create a modern, sustainable and efficient waste management system that improves the quality of life of citizens and protects the environment.

In this procedure, the Contracting Authority concludes an Partnership for Innovation[[2]](#footnote-2) Agreement, which is implemented in phases that accompany the process of research, development and final implementation of the innovative solution in accordance with the procurement documents.

**Other notes:**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority may make any other comments it deems relevant to the subject and the procurement procedure, such as the type of funding, relevant regulations, etc.).*

1. CRITERIA FOR QUALITATIVE SELECTION OF ECONOMIC OPERATOR (GROUNDS FOR EXCLUSION AND CRITERIA FOR SELECTION OF ECONOMIC OPERATOR) WITH GUIDELINES FOR DEMONSTRATING COMPLIANCE WITH THESE CRITERIA
	1. GROUNDS FOR EXCLUSION

**2.1.1. A final judgement for one or more criminal offences**

**Legal grounds:**

Article 111, paragraph 1, item 1) of the PPL prescribes the following - the Contracting authority/entity shall exclude an economic operator from public procurement procedure if the economic operator fails to prove that it or its legal representative in the period of the previous five years up to the date of expiry of the time limit for submission of tenders, i.e., requests, has not been convicted by the final judgement, unless where different period of exclusion from the participation in the public procurement procedures has been set by the final judgement for:

1. the criminal offence he/she committed as a member of an organised criminal group and criminal offence of organising for the purpose of committing criminal offences;
2. the criminal offence of abuse of the position of the responsible person, the criminal offence of misconduct in connection with public, the criminal offence of taking bribe in performing an economic activity, the criminal offence of giving bribe in performing an economic activity, the criminal offence of abuse of official position, the criminal offence of trafficking in influence, the criminal offence of accepting bribe and the criminal offence of bribery; the criminal offence of fraud, the criminal offence of obtaining and using the loan and other benefits, the criminal offence of fraud in performing an economic activity and the criminal offence of tax evasion; the criminal offence of terrorism, criminal offence of public incitement to commit terrorist acts, the criminal offence of recruitment and training for the commission of terrorist acts and the criminal offence of terrorist association; the criminal offence of money laundering and the criminal offence of financing terrorism; the criminal offence of trafficking in human beings and the criminal offence of establishing a slavery relation and transportation of persons in slavery relation

**Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The Contracting Authority is obliged to request proof of fulfilment of criteria for qualitative selection of economic operator from all candidates before recognising the qualification.

It is assumed that an economic operator entered in the list of tenderers does not have any grounds for exclusion pursuant to Article 111, paragraph 1, item 1) the Law on Public Procurement.

The absence of grounds for exclusion is proven by the following Proof:

**Legal entities and entrepreneurs:**

1. Confirmation from the competent Basic Court in whose jurisdiction the registered office of the domestic legal entity or entrepreneur or the registered office of the representative office or branch of a foreign legal entity is located is required. This confirmation must verify that the tenderer has not been convicted by final judgement within the five years prior to the deadline for submission of applications, unless a different prohibition period has been specified by a final judgement. The confirmation applies for the following offences: tax evasion; fraud; unjustified obtaining and claiming of credit and other benefits; abuse of an official position; influence peddling; bribery; trafficking in human beings (for the forms under Article 388, paragraphs 2, 3, 4, 6, 8 and 9 of the Criminal Code) and creating a state of slavery and transporting persons in a state of slavery (for the forms under Article 390, paragraphs 1 and 2 of the Criminal Code).
2. Confirmation from the competent Basic Court in whose jurisdiction the registered office of the domestic legal entity or entrepreneur or the registered office of the representative office or branch of a foreign legal entity is located is required. This confirmation must verify that the tenderer has not been convicted by final judgement within the five years prior to the deadline for submission of applications, unless a different prohibition period has been specified by a final judgement. The confirmation applies for the following offences: abuse of an official position if the value of the pecuniary advantage obtained exceeds 1,500,000.00 dinars; trafficking in human beings (for forms under Article 388, paragraphs 1, 5 and 7 of the Criminal Code); inducing a state of slavery and transporting persons in a state of slavery if committed against a minor, and accepting bribes.
3. Confirmation of the Special Department of the High Court in Belgrade for Organised Crime that the legal entity or entrepreneur has not been convicted of any of the following criminal offences: criminal offences of organised crime; criminal offence of association for the purpose of committing criminal offences; offences of abuse of official position, influence peddling, accepting bribes and giving bribes, when the accused or the person to whom the bribe is paid is a public official or a person in authority exercising a function based on an election, appointment or delegation by the National Assembly, the President of the Republic, the General Assembly of the Supreme Court of Cassation, the Supreme Judicial Council or the Public Prosecutor's Council; offences against the economy if the value of the material gain exceeds 200.000.000 dinars, or if the value of the public procurement exceeds 800,000.000 dinars, and in particular for: criminal offence of abuse in connection with public procurement, criminal offence of accepting bribes in the performance of economic activities, criminal offence of giving bribes in the performance of economic activities, criminal offence of fraud in the performance of economic activities, criminal offence of abuse of the position of a responsible person, criminal offence of money laundering – if the property subject to money laundering originates from all of the above criminal offences; the offence of public incitement to commit terrorist acts; the offence of financing terrorism; the offence of terrorism; the offence of recruitment and training for the commission of terrorist acts and the offence of terrorist organisation.
4. Confirmation of the Special Anti-Corruption Department of the High Courts in Belgrade, Novi Sad, Niš and Kraljevo that the legal entity or entrepreneur has not been convicted of any of the following criminal offences: criminal offence of accepting bribes in the exercise of economic activities; criminal offence of giving bribes in the exercise of economic activities; criminal offence of abuse in connection with the award of public contracts; criminal offence of fraud in the exercise of economic activities; criminal offence of abuse of the position of a responsible person and criminal offence of money laundering.

**Legal representatives and natural persons:**

1. Extract from the criminal record, or certificate from the competent police administration of the Ministry of the Interior, confirming that the legal representative or natural person has not been convicted of the following criminal offences:
2. the criminal offence he/she committed as a member of an organised criminal group and criminal offence of organising for the purpose of committing criminal offences;
3. the criminal offence of abuse of the position of the responsible person, the criminal offence of misconduct in connection with public, the criminal offence of taking bribe in performing an economic activity, the criminal offence of giving bribe in performing an economic activity, the criminal offence of abuse of official position, the criminal offence of trafficking in influence, the criminal offence of accepting bribe and the criminal offence of bribery; the criminal offence of fraud, the criminal offence of obtaining and using the loan and other benefits, the criminal offence of fraud in performing an economic activity and the criminal offence of tax evasion; the criminal offence of terrorism, criminal offence of public incitement to commit terrorist acts, the criminal offence of recruitment and training for the commission of terrorist acts and the criminal offence of terrorist association; the criminal offence of money laundering and the criminal offence of financing terrorism; the criminal offence of trafficking in human beings and the criminal offence of establishing a slavery relation and transportation of persons in slavery relation.

The request may be made on the basis of the place of birth or place of residence of the legal representative or natural person. If the tenderer has several legal representatives, he/she is obliged to provide proof for each of them.

**An economic operator registered in another state:**

If an economic operator is registered in another state, the Contracting Authority shall accept as proof that there is no reason for exclusion an extract from the criminal record or other appropriate register or, if this is not possible, an appropriate document from the competent judicial or administrative authority of the state in which the economic operator is registered or of the state of which the person is a national. If the state in which the economic operator is registered or the state of which the person is a national does not issue the aforementioned proofs or if the proofs do not contain all the information on the absence of grounds for exclusion, the economic operator may submit, instead of Proof, a written statement made under criminal and material liability and authenticated before a judicial or administrative authority, a public notary or another competent authority of that state, stating that none of the aforementioned grounds for exclusion apply to the economic operator.

**2.1.2. Taxes and contributions**

**Legal grounds:**

 Article 111, paragraph 1, item 2 of the PPL prescribes the following -

Contracting authority/entity shall exclude an economic operator from public procurement procedure if the economic operator fails to prove it has settled due taxes and contributions for compulsory social insurance or that the payment of debt has been postponed, in accordance with a special regulation, under a container ding agreement or decision, including any interests accrued and fines.

 **Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The Contracting Authority is obliged to request proof of fulfilment of criteria for qualitative selection of economic operator from all candidates before recognising the qualification.

It is assumed that an economic operator entered in the list of tenderers does not have any grounds for exclusion pursuant to Article 111, paragraph 1, item 2) the Law on Public Procurement.

The absence of grounds for exclusion is proven by the following evidence: 1) Confirmation of competent tax authority that the tenderer has settled due taxes and contributions for compulsory social insurance or that the payment of debt has been postponed, in accordance with a special regulation, under a bidding agreement or decision, including any interests accrued and fines. 2) Confirmation of competent local tax authority that the tenderer has settled due taxes and contributions for compulsory social insurance or that the payment of debt has been postponed, in accordance with a special regulation, under a bidding agreement or decision, including any interests accrued and fines. A legal entity undergoing privatisation must submit a confirmation from the competent authority that it is undergoing privatisation instead of the Proof referred to in points 1) and 2).

 **An economic operator registered in another state:**

If an economic operator has its registered office in another state, as proof that there are no grounds for exclusion under Article 111, paragraph 1, item 2 of this Law, the Contracting Authority shall accept the certificate from the competent authority in the state of the economic operator's registered office.

If the state in which the economic operator is registered or the state of which the person is a national does not issue the aforementioned proofs or if the proofs do not contain all the information on the absence of grounds for exclusion, the economic operator may submit, instead of proof, a written statement made under criminal and material liability and authenticated before a judicial or administrative authority, a public notary or another competent authority of that state, stating that none of the aforementioned grounds for exclusion apply to the economic operator.

**2.1.3 Obligations in the field of environmental protection, social rights and labour rights**

**Legal grounds:**

Article 111, paragraph 1, item 3) of the PPL prescribes the following - The contracting authority/entity shall exclude an economic operator from public procurement procedure if it determines that the economic operator has in the period of the previous two years up to the date of expiry of the time limit for submission of tenders, i.e., requests, violated applicable obligations in the area of the environmental protection, social and labour law, including collective agreements, and in particular the obligation to disburse the contracted wages, or other compulsory payments, including obligations in accordance with the provisions of the international conventions listed in Annex 8 of the Law on Public Procurement.

**Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The absence of grounds for exclusion shall be determined by the Contracting Authority.

**2.1.4 Conflict of interests**

**Legal grounds:**

Article 111, paragraph 1, item 4) of the PPL prescribes the following - The contracting authority/entity shall exclude an economic operator from public procurement procedure if there is a conflict of interest, within the meaning of this Law, which cannot be remedied by other measures.

**Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The absence of grounds for exclusion shall be determined by the Contracting Authority.

**2.1.5 Undue influence on the procedure**

**Legal grounds:**

Article 111, paragraph 1, item 5) of the PPL prescribes the following - The contracting authority shall exclude an economic operator from public procurement procedure if it determines that the economic operator has undertaken to unduly influence the decision-making process of the contracting authority/entity or obtain confidential information that may confer upon it undue advantage in the public procurement procedure or to has provided misleading information that may have effect on decisions concerning the exclusion of economic operator, the selection of an economic operator or the award of a contract.

**Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The absence of grounds for exclusion shall be determined by the Contracting Authority.

* + 1. **Bankruptcy, payment capability, liquidation, etc.**

**Legal grounds:**

Article 112, paragraph 1, item 1) of the PPL prescribes the following - The contracting authority shall exclude an economic operator from public procurement procedure if it determines that the economic operator is bankrupt, insolvent, or is the subject of the winding up proceedings, that its assets are being administered by a bankruptcy trustee (liquidator) or by the court, that it is in an arrangement with creditors, that its business activities are suspended, or that it is in any analogous situation arising from a similar procedure under national laws and regulations.

**Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The Contracting Authority is obliged to request proof of fulfilment of criteria for qualitative selection of economic operator from all applicants before recognising the qualification.

The absence of grounds for exclusion shall be determined by the Contracting Authority.

**An economic operator registered in another state:**

If an economic operator has its registered office in another state, as proof that there are no grounds for exclusion, the Contracting Authority shall accept the certificate from the competent authority in the state of the economic operator's registered office. If the state in which the economic operator is registered or the state of which the person is a national does not issue the aforementioned proofs or if the proofs do not contain all the information on the absence of grounds for exclusion, the economic operator may submit, instead of Proof, a written statement made under criminal and material liability and authenticated before a judicial or administrative authority, a public notary or another competent authority of that state, stating that none of the aforementioned grounds for exclusion apply to the economic operator.

* + 1. **Violations of previously concluded contracts**

**Legal grounds:**

Article 112, paragraph 1, item 5) of the PPL prescribes the following - The contracting authority shall exclude an economic operator from public procurement procedure if it determines that the economic in the period of previous three years until the date of expiry of the time limit for the submission of tender did not meet obligations under the previously concluded public procurement contract, or of a previously concluded concession contract, which resulted in termination of that prior contract, collection of security instruments, damages or other.

**Method of proof of fulfilment of the criteria**:

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The absence of grounds for exclusion shall be determined by the Contracting Authority.

* + 1. **False data and failure to provide a proof**

**Legal grounds:**

Article 112, paragraph 1, item 6) of the PPL prescribes the following - The contracting authority shall exclude an economic operator from public procurement procedure if it determines that the economic operator has in the public procurement procedures in the period of the previous three years until the date of expiry of the time limit for submission of tenders supplied false information required for the verification of grounds for exclusion or the criteria for the selection of economic operator, or has not been able to submit Proof on fulfilment of criteria for qualitative selection of economic operator, if it had used as Proof a declaration referred to in Article 118 of the Law on Public Procurement.

**Method of proof of fulfilment of the criteria:**

The economic operator is obliged to prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, confirming that there are no grounds for exclusion.

The absence of grounds for exclusion shall be determined by the Contracting Authority.

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| ***Note:*** *In this model tender documentation, items 2.1.6 – 2.1.8 list some of the grounds for exclusion from Article 112 of the PPL as examples. The Contracting Authority is not obliged to specify the grounds for exclusion provided for in Article 112 of the PPL, but if it decides to apply them, it is obliged to indicate them in the documentation and to exclude an economic operator from the procurement procedure if it establishes at any stage of the procurement procedure that the said grounds for exclusion exist (except in the case of application of Article 113 of the PPL).* |

* 1. CRITERIA FOR SELECTION OF ECONOMIC OPERATOR
		1. **Technical and professional capacity**

**Legal grounds:**

Article 117, paragraph 1 of the PPL prescribes the following - The contracting authority may set requirements ensuring that economic operator possesses the necessary human and technical resources and experience necessary to perform the public procurement contract to an appropriate quality level, and may require, in particular, that economic operator has sufficient experience in terms of contracts performed in the past.

 **2.2.2.1. List of services provided**

**Additional description of the criteria:**

1. The economic operator has implemented at least one project that fulfils all of the following requirements in the five years prior to the application deadline:

1. The goal of the project was to develop and implement a programme that uses advanced technologies - mandatory IoT (Internet of Things, where devices equipped with sensors are connected to the Internet to collect data);
2. Part of the project included the development of a data analysis programme (using the data collected via the IoT) from which conclusions/results can later be drawn;
3. Part of the project included the development of an application for users (accessible via computers and mobile phones – Android, iOS) that allows them to receive the necessary news from the project area and actively participate in making suggestions and/or criticisms about the project area;
4. It is necessary that the developed programme is still in use and that the programme user (the contracting authority) confirms that the developed programme has fully met all the requirements and expectations of the project task.

2. The economic operator has been involved in the performance (independently, in a group or as a subcontractor) of at least one contract having as its subject-matter waste management and covering one of the following activities in the five years preceding the deadline for submission of applications:

1. Waste collection: the organisational process of collecting waste from households, industry and other sources.
2. Waste transport: The transport of waste to treatment or disposal facilities.
3. Recycling: The process of processing waste to produce new products or materials instead of sending it to landfill.
4. Waste treatment: Techniques used to convert waste into useful materials or energy.
5. Waste disposal: Includes methods such as landfilling, incineration or composting, depending on the type of waste.
6. Waste reduction: The creation of a comprehensive plan/strategy aimed at reducing the total amount of waste generated by the consumption of goods and services.

**Method of proof of fulfilment of the criteria:**

The economic operator must prepare and submit a declaration of fulfilment of qualitative selection criteria for economic operator via the Portal together with the application, in which it confirms that it fulfils this selection criterion for economic operators and in which it should provide the data on the contract that proves the fulfilment of the criterion (subject of the contract, date of conclusion of the contract and who the contracting authority is).

The Contracting Authority is obliged to request proof of fulfilment of criteria for qualitative selection of economic operator from all candidates before recognising the qualification.

* For criterion number 1, the following documents must be submitted:
1. Confirmation from the contracting authority containing the following information:
2. Name of the user/Contracting Authority of the project
3. Name of the tenderer with whom the contract was concluded
4. Project title
5. Date of conclusion of the contract and time of execution of the work
6. Description of the project showing that all elements of the project required under this capacity have been fulfilled:
* objective/task of the project,
* which technologies were used,
* whether the project included the development of a data analysis programme that uses the data collected via the IoT from which conclusions/results can be drawn later,
* whether the project included the development of an application for users (accessible via computers and on mobile phones – Android, iOS) that allowed them to receive the necessary news from the project's domain as well as to actively participate in making suggestions and/or criticisms on the project's domain.
1. The Contracting Authority's declaration that the tenderer has fulfilled all the requirements of the project task in full and within the agreed deadlines and that the developed programme is still in use;
2. contact details of the contracting authority (first and last name of the contact person, telephone number and email address of the contact person).
* For criterion number 2, the following documents must be submitted:

Copy of the Contract or project documentation showing the economic operator's involvement in the waste management project;

1. Confirmation from the Contracting Authority containing the following information:
2. Name of the user/Contracting Authority of the project,
3. Name of the tenderer with whom the contract was concluded (name of the subcontractor if this was the role of the economic operator),
4. Project title,
5. Date of conclusion of the contract and time of execution of the work,
6. Project description showing the subject of the project,
7. Description of the service provided by the economic operator,
8. Contact details of the Contracting Authority (first and last name of the contact person, telephone number and email address of the contact person).

***Note: The Contracting Authority reserves the right to verify the accuracy of the information provided in the declaration and the Proof submitted.***

**2.2.2.2 Educational and professional qualifications**

**Additional description of the criteria:**

The economic operator participating in the procedure of this public tender must have, at the time of submission of the application, at least 12 employees who will be entrusted with the execution of the Contract in accordance with the provisions of the law on the rights, duties and responsibilities arising from employment, namely:

**1. One (1) Project Manager**

 - Education: University education (minimum 240 ECTS credits) in the field of computer engineering, computer science, mathematical sciences or organisational sciences.

 - Certificates: PMP (Project Management Professional) or PRINCE2.

 - Experience: At least 5 years of experience in project management.

**2. One (1) Waste Management Specialist**

 - Education: University education (minimum 240 ECTS credits) in environmental science, environmental engineering or life sciences (Graduate Ecologist)

 - Experience: At least 5 years of professional experience in companies active in waste management, in activities directly related to waste management or participation in at least one (1) project focussed on waste management. Waste management includes any of the following activities: waste collection, waste transport, recycling, waste processing, waste disposal or waste reduction.

**3. Five (5) Software Developers (for the central system and the application)**

 - Education: University education (at least 240 ECTS credits) in the field of computer science, mathematical sciences or technical sciences.

 - Certificates:

* 1. Web development certificate covering the basics of HTML, CSS, JavaScript and web application development approaches - e.g., Certified Web Developer, Azure Developer Associate, W3C Certified Front-End Web Developer, etc.;
	2. Certificate for mobile development - e.g., Google Associate Android Developer, Apple Certified iOS Developer, Flutter Certified Application Developer, etc.;
	3. General certification in software development – e.g., DevOps Engineer Expert, Scrum Master Certified (SMC), Certified Scrum Developer (CSD), etc.;
	4. Certificate for IoT platforms – e.g. AWS Certified Solutions Architect, Azure IoT Developer Specialty, Cisco Certified Network Associate (CCNA) IoT, Certified Internet of Things Practitioner (CIoTP), etc.

 - Experience:

1. At least 5 years of experience in developing software solutions (at least one solution) - to be demonstrated by all five (5) developers.
2. Experience in the development and implementation of at least one (1) software solution based on the application of IoT - demonstrated by at least three (3) programmers.
3. Experience in the development and implementation of at least one (1) software solution involving application development - demonstrated by at least two (2) programmers.
4. Experience in the development and implementation of at least one (1) software solution involving data collection and analysis - demonstrated by at least one (1) programmer.

**4. One (1) data analyst**

 - Education: University education (minimum 240 ECTS) in the field of applied statistics, computer science or mathematical sciences.

 - Certifications in analytical tools: R programming certificate, Python certification, SQL certification or similar.

- Certifications in data visualisation: Microsoft Certified Data Analyst Associate, Microsoft Certified Data Scientist Associate, Tableau Desktop Specialist, Tableau Certified Associate or similar.

 - Experience: At least one year of experience analysing data and creating reports.

**5. One (1) Marketing and Communication Specialist**

 - Education: University education (at least 240 ECTS) in the field of marketing or communication.

 - Experience: Experience in developing at least one (1) educational programme and working with the community, i.e., citizens.

**6. Three (3) Technical Support and Maintenance Specialists**

 - Education: Secondary school diploma in electrical, information technology or mechanical fields.

 - Experience: At least five (5) years of experience in software maintenance and support.

**Method of proof of fulfilment of the criteria:**

The economic operator must draw up and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, in which it confirms that it fulfils these criteria for the selection of the economic operator. In addition, it must indicate the names of the staff recruited and their role in the performance of the works.

The Contracting Authority is obliged to request proof of fulfilment of criteria for qualitative selection of economic operator from all candidates before recognising the qualification.

 This criterion will be demonstrated by the submission of the following documents:

* For persons employed by the applicant - a copy of the employment contract and the social security registration form (Form M);
* For persons employed on another basis, a copy of the employment contract;
* CVs for each person, clearly stating the experience to be verified. The CV must have handwritten signatures and include contact information to verify the experience information with the employers listed on the resume (name of employer, name of contact person, phone number and email address of contact person);
* A copy of the diploma for each person;
* A copy of required certifications.

***Note:***

* ***The Contracting Authority reserves the right to verify the authenticity of the information provided in the CVs.***
* ***The tenderer who is awarded the Contract is obliged to employ the persons listed in the declaration or persons with equivalent or better qualifications, provided that the Contracting Authority gives prior written consent and the necessary proof of educational and professional qualifications is submitted.***
	+ 1. **Quality assurance standards**

**Legal grounds:**

Article 126 of the PPL prescribes the following - Where contracting authority/entity requires the submission of certificates drawn up by independent bodies attesting that the economic operator complies with certain quality assurance standards, including on accessibility for disabled persons, it shall refer to quality assurance systems based on the relevant standards certified by accredited bodies.

**Additional description of the criteria:**

The economic operator participating in a public procurement procedure must demonstrate compliance with specific quality assurance standards and must have them in place:

* SRPS ISO/IEC 27001 - Information Security Management System or equivalent.
* SRPS ISO/IEC 20000-1 - Service Management System in the field of information technology or equivalent.
* SRPS ISO/IEC 14001 - Environmental Management System.

**Method of proof of fulfilment of the criteria:**

The economic operator must prepare and submit via the Portal a declaration of fulfilment of criteria for qualitative selection of economic operator, in which it confirms that it fulfils these criteria for the selection of the economic operator and declares that it has valid required certificates.

The Contracting Authority is obliged to request proof of fulfilment of criteria for qualitative selection of economic operator from all candidates before recognising the qualification. This criterion shall be demonstrated by submitting a photocopy of the valid required certificates.

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| ***Note:*** *Article 60, paragraph 8 of the PPL provides for the possibility that The Contracting Authority applies criteria concerning the economic operators’ capacity in the field of research and development and in developing and implementing innovative solutions. The Contracting Authority determines the criteria for selection of economic operator, whenever necessary, taking into account the subject of the procurement, in such a way that they are logically related to the subject of the respective procurement and proportionate to the subject of the contract (Articles 114–117 of the PPL). The selection criteria presented here are merely examples of how they can be defined.* |

3. THE WAY IN WHICH THE CONTRACTING AUTHORITY WILL IMPLEMENT THE PARTNERSHIP FOR INNOVATION IN PHASES, THE TIME-LIMITED OBJECTIVES THAT THE PARTNERS SHOULD ACHIEVE IN EACH PHASE, THE CONDITIONS FOR TERMINATING THE PARTNERSHIP, THE TERMS AND CONDITIONS, THE METHOD OF PAYMENT AND THE AMOUNT OF COMPENSATION PAID TO THE PARTNER

* 1. THE METHOD BY WHICH THE CONTRACTING AUTHORITY WILL IMPLEMENT THE PARTNERSHIP FOR INNOVATION BY PHASE AND THE PRELIMINARY OBJECTIVES TO BE ACHIEVED BY THE PARTNERS

Partnership for innovation is implemented in six main phases:

**PHASE 1: INITIAL PLANNING AND RESEARCH**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority specifies the estimated duration of this phase, e.g., 2 months from the date of conclusion of the Contract).*
* **Objective**: Lay the foundations for future activities and involve all relevant stakeholders.
* **Activities**:
	+ Identification of key stakeholders (local authorities, citizens).
	+ Carry out an analysis of the needs and expectations of the Contracting Authority and users with regard to waste management. All collected data and conclusions will be presented in a study.
* **Preliminary objectives**:
* Collection of information on the current waste management system.
* Formation of a working group with representatives from all relevant areas.

####

**PHASE 2: DEVELOPMENT OF CONCEPT AND STRATEGY**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority specifies the estimated duration of this phase, e.g., 4 months after completion of the Phase I).*
* **Objective**: Develop a clear strategy and technical specifications for a smart waste management system.
* **Activities**:
	+ Develop technical specifications that define the functionalities of the smart containers, sensors, centralised system and applications.
	+ Develop a strategy to involve citizens in the recycling and waste management process.
* **Preliminary objectives**:
	+ Drafting and approval of the technical specifications and strategy.
	+ Obtaining the Contracting Authority's approval of the implementation plan.

**PHASE 3: PILOT PROJECT**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority specifies the estimated duration of this phase, e.g., 6 months after completion of the Phase II).*
* **Objective**: Test the basic functionalities of the system at a limited number of locations.
* **Activities**:
	+ Install sensors in waste containers in selected areas.
	+ Monitor and collect data on the performance of the waste collection and recycling systems.
* **Preliminary objectives**:
* Finalise the installation of the sensors in the waste containers and start monitoring their performance.
* Gather feedback from users and analyse the results of the pilot project.

**PHASE 4: EVALUATION AND OPTIMISATION**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority specifies the estimated duration of this phase, e.g., 2 months after completion of the Phase III).*
* **Objective**: Evaluate the results of the pilot project and improve the system before full implementation.
* **Activities**:
	+ Analyse the data collected during the pilot project and identify potential problems and benefits.
	+ Involve all stakeholders in the evaluation process to obtain feedback.
* **Preliminary objectives**:
	+ Produce a Final Report with recommendations for system optimisation.
	+ Create a plan for broader implementation based on the results of the pilot.

PHASE 5: **FULL IMPLEMENTATION OF THE SYSTEM AND USER TRAINING**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority specifies the estimated duration of this phase, e.g., 2 months after completion of the Phase IV).*
* **Objective**: Complete implementation of the intelligent waste management system at the designated locations and train users.
* **Activities**:
* Install sensors in waste containers at all planned locations.
* Develop and implement a system for analysing and visualising the collected data.
* Train the use of the system.
* **Preliminary objectives**:
	+ Start of operational support and system maintenance.
	+ Regularly collect and analyse data on the use and success of the system.
* Phase V represents a subsequent purchase of the developed system, which the Contracting Authority is not obliged to realise, so that the partnership can be terminated after completion of the Phase IV. All obligations in the procurement documents relating to Phase V must be fulfilled by the Partner unless the Contracting Authority withdraws from Phase V, of which it will be informed of no later than 30 days after completion of Phase IV.

PHASE 6: **MONITORING AND CONTINUOUS IMPROVEMENT**

* Phase VI will only be implemented once the Phase V has been completed.
* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(The Contracting Authority specifies the estimated duration of this phase, e.g., 12 months after completion of the Phase V).*
* **Objective**: Ensure the long-term sustainability and efficiency of the system.
* **Activities**:
	+ Regularly monitor system performance and obtain feedback from citizens and employees.
	+ Improve services based on data analyses and user feedback.
* **Preliminary objectives**:
	+ Producing an annual report on the targets achieved and progress in waste management.
	+ Implement new solutions and improvements based on analysed data and user recommendations.

**Note:** The deadlines for each phase are subject to negotiation.

* 1. CONDITIONS FOR THE TERMINATION OF THE PARTNERSHIP

Under the following circumstances, the partnership can be terminated and the Contract cancelled:

#### ****Phase 1: Initial planning and research****

* **Reasons for termination**:
	+ Failure to identify key stakeholders or engage them may lead to a loss of trust between the Partners.
	+ Failure to adequately analyse user needs and expectations can lead to disagreements between the Partners about the right priorities.
* **Consequence**: The partnership may be terminated due to a lack of clarity about future steps and a clear vision of the project.

#### ****Phase 2: Development of concept and strategy****

* **Reasons for termination**:
	+ Failure to develop a clear technical specification or strategy that is aligned with the needs of all stakeholders can lead to disagreements between the Partners.
	+ Non-functioning or unclear implementation plans can lead to a loss of confidence in the ability to deliver the project.
* **Consequence**: Termination of the partnership may occur due to disagreements over technical solutions or strategies that do not align with the interests of all parties.

#### ****Phase 3: Pilot project****

* **Reasons for termination**:
	+ Failure to implement the pilot project, e.g., delays in installation or poor system performance, may indicate unacceptable risks or costs.
	+ If no user feedback is obtained or negative reactions are observed, this can lead to a dilemma regarding the continuation of the partnership.
* **Consequence**: Lack of success during the pilot project may lead to termination of the partnership as expectations have not been met.

#### ****Phase 4: Evaluation and optimisation****

* **Reasons for termination**:
	+ If the data from the pilot project is not analysed successfully or the results are not taken into account, this can lead to a loss of trust in the partnership.
	+ Inconsistencies in the optimisation recommendations or the inability to actually implement the necessary changes can lead to the termination of the partnership.
* **Consequence**: Problems with evaluation and optimisation can lead to the termination of the partnership if significant problems are not identified.

#### ****Phase 5: Full implementation of the system and user training****

* **Reasons for termination**:
	+ Delays in testing or implementation of the system can lead to disagreements between the Partners regarding expectations and resources.
	+ If the system is not installed and functioning according to specifications, this can raise serious doubts about the effectiveness of the partnership.
* **Consequence**: Failure at this stage can lead to termination of the partnership because previously agreed points have not been carried out.

#### ****Phase 6: Monitoring and continuous improvement****

* **Reasons for termination**:
	+ If data is not collected and user feedback is not analysed, stagnation can occur, undermining the purpose of the partnership.
	+ Failure to accept recommendations for improvement are not accepted or operational problems are not recognised, this can lead to dissatisfaction among the Partners.
* **Consequence**: Disagreements about future development can lead to the termination of the partnership as there is no proactive approach to improvement.

**Failure to start the project or meet agreed deadlines**:

* + If a Partner fails to commence or complete activities at any phase without good cause, the Contracting Authority has the right to terminate the Contract. Delays can only be justified by force majeure events or other objective reasons that could not have been foreseen.

**Breach of contractual obligations:**

* + If the Partner breaches the terms of the Contract, including but not limited to:
		- Breach of confidentiality of data or disruption of technical standards.
		- Inadequate co-operation with the contracting authority during the partnership phases.

3. METHOD OF PAYMENT AND AMOUNT OF COMPENSATION

Payment is made in phases, depending on the achievement of the defined objectives, after confirmation of the achievement of the objectives by the Contracting Authority and signing of the final protocol for the phase, within 45 days of receipt of a correct invoice:

1. PHASE 1:
	* Compensation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(e.g., 10% of the total contract value).*
	* Payment method: After submission of the study and confirmation from the contracting authority that the objective has been achieved and after signing the Phase Completion Report.
2. PHASE 2:
	* Compensation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(e.g., 30% of the total contract value).*
	* Payment method: After acceptance of the technical specifications and the strategy and after signing the final protocol for the phase.
3. PHASE 3:
	* Compensation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(e.g., 30% of the total contract value).*
	* Payment method: After successful completion of the pilot implementation and submission of the test report, confirmation from the Contracting Authority that the objective has been achieved and signing of the final protocol for the phase.
4. PHASE 4:
	* Compensation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(e.g., 10% of the total contract value).*
	* Payment method: After acceptance of the report with recommendations for system optimisation and signing of the final protocol for the phase.
5. PHASE 5:
	* Compensation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(e.g., 10% of the total contract value).*
	* Payment method: After completion of the final implementation, user training, confirmation of the operational functionality of the system and signing of the final protocol for the phase - handover of the system and commissioning of the system.
6. PHASE 6:
	* Compensation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(e.g., 10% of the total contract value).*
	* Payment method: After approval of the annual performance report of the system and signing of the final protocol for the phase.

**Note:** The total contract value represents the value of all six phases. The percentage share of the compensation value for each individual phase in the total contract value is a matter for negotiation.

4**. OTHER TERMS**

**Warranty period and technical support:** The Partner is obliged to provide technical support during the warranty period, which is at least 2 years from the commissioning of the system.

4. METHOD OF REGULATING INTELLECTUAL PROPERTY RIGHTS

The intellectual property rights arising from the implementation of the project are regulated as follows:

RIGHTS TO THE DEVELOPED SOLUTION

1. Rights of the Partner:
	* The Partner shall retain all tangible and intangible rights to the software and all other results developed or produced within the framework of this partnership.
2. The Contracting Authority's s rights of use:
	* The Contracting Authority shall be granted the unrestricted, royalty-free and non-exclusive right to use, copy, modify and further develop the software and the solutions, either independently or with the help of a third party.
	* The source code as well as the corresponding technical specifications, instructions, licences for the free use and modification of the system and all other documents required for the use of the system must be handed over to the Contracting Authority within 10 working days after the testing of the solution, i.e., after completion of Phase 3 of the pilot project.
	* The Contracting Authority may use the solution within the scope of its needs, including installation, implementation, training and integration with other systems, as well as the right to reproduce the number of copies of the Software Solution required for normal operation and security procedures.
	* The Contracting Authority shall not have the right to sell or distribute the developed solution to third parties without the Partner's prior written consent.

INTELLECTUAL PROPERTY PROTECTION

* + The Partner guarantees that the solution does not infringe the intellectual property rights of third parties established by law or international agreements. In the event of an infringement, the Partner is obliged to assume responsibility and bear the costs of protecting the Contracting Authority from any legal consequences.

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| ***Note:*** *The main relevant regulations governing issues related to intellectual property rights include: the Law on Copyright and Related Rights (“Official Gazette of the RS”, no. 104/09, 99/11, 119/12, 29/16 Decision of the Constitutional Court and 66/19); the Law on Patents ("Official Gazette of the RS", no. 99/11, 113-17- as amended, 95/18, 66/19 and 123/21); the Law on Trademarks (“Official Gazette of the RS”, no. 6/20); the Law on Protection of Industrial Designs (“Official Gazette of the RS”, no. 104/09, 45/15 and 44/18 as amended); the Law on Geographical Indications (“Official Gazette of the RS”, no. 18/10); the Law on the Protection of Topographies of Semiconductor Products (“Official Gazette of the RS”, no. 55/13 and 66/19); the Law on Special Powers for the Protection of Intellectual Property Rights (“Official Gazette of the RS”, no. 46/06, 104/09 – as amended and 129/21).* |

5.METHOD AND DEADLINE FOR THE SUBMISSION OF APPLICATIONS

In accordance with Article 45 of the PPL, applications for the public procurement procedure are submitted electronically via the Public Procurement Portal.

The deadline for submitting applications is \_\_\_\_\_\_\_\_\_\_ by \_\_\_\_ hours. *(The Contracting Authority sets the minimum deadline for the submission of applications in accordance with Article 60, paragraph 7 of the PPL).*

*If a certain part of the application is not submitted via the Public Procurement Portal, the Contracting Authority shall determine the method of submitting this part of the application in accordance with Article 45, paragraph 3 of the PPL.*

6.INFORMATION ON THE CRITERION FOR THE AWARD OF THE CONTRACT

**Subject: Development of a smart waste management system**

The Contracting Authority shall award the contract under the public procurement procedure to the most economically advantageous tender on the basis of the relationship between price and quality, applying the following criteria:

|  |  |
| --- | --- |
| **Criterion** | **Points** |
| 1. | Price  | 45 |
| 2. | Quality  | 55 |
| **Total** | **100** |

Once the negotiated procedure has been completed, the Contracting Authority shall rank the acceptable final tenders according to the established criteria and award the contract to the tender with the highest overall score.

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| The total score is equal to the sum of the points for each criterion.  |
|   Bu = Bc + ∑ Bk  k | Bu - total number of points Bc - number of points for the price k - criterion Bk - number of points for the quality criterion |
|  |  |

1**. PRICE CRITERION**

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| --- |
| The tender under this criterion can be awarded a maximum of 45 points. Formula for calculating the points for the price criterion: **The maximum number of points for the best value offered; other values offered are ranked in relation to the best value.**  |
|   B = minC/C x P | B - number of points for the price minC - the price of the lowest offer C - price offered P - weight value of the price |

1. QUALITY CRITERION

The tender based on the quality criterion can be awarded a maximum of 55 points.

The quality criterion consists of the criteria elements listed in the following table, each of which is given the corresponding number of points.

|  |  |  |
| --- | --- | --- |
|  | **Elements of the quality criterion.** | **Points** |
| 2.1. | Quality of the personnel deployed.  | 19 |
| 2.2. | Additional technical innovations. | 20 |
| 2.3.  | Response time for technical support. | 6 |
| 2.4. | Length of warranty period with technical support. | 10 |
|  | **Total**  | 55 |

**2.1. Quality of the staff employed - maximum 19 points**

Under this criterion element, the qualitative characteristics of the persons who will be involved in the implementation of the Contract (team members) shall be evaluated, as indicated by the economic operator in the declaration of compliance with the criteria for qualitative selection of economic operators, according to the following criteria and scoring methodology:

**2.1.1. Experience of the Software Developers - maximum 10 points.**

* Each team member who has experience in the development of software solutions in the field of waste management within the last five years prior to the deadline for submission of proposals is awarded 2 points, so that a maximum of 5 team members are awarded e a total of 10 points.
* If no software developer has had experience in the development of software solutions in the field of waste management within the last five years before the deadline for submission of tenders, he/she is awarded 0 points.
* The project for which the experience is proven must have been successfully completed.
* Waste management includes any of the following activities: waste collection, waste transport, recycling, waste processing, waste disposal or waste reduction.
* **Proof:** The tenderer must submit with the tender **signed CVs** of the named persons, clearly indicating the required experience being assessed, **and confirmations signed by the Contracting Authority**, containing all the required information: name and description of the activity; involvement of the person to whom the confirmation refers in the implementation of the project (role/position in the project, job description); details of the Contracting Authority where the experience was gained (name of the Contracting Authority, address, contact person at the Contracting Authority – first and last name, position, email address and telephone number); date of project implementation; indication that the project was successfully completed in accordance with the contractually agreed quality.

**2.1.2. Experience of the Project Manager - maximum 6 points**

* A team member appointed as Project Manager must have managed projects in the field of waste management within the last five years prior to the tender deadline - 1 point is awarded for 1 project, 3 points for 2 projects and 6 points for 3 or more projects.
* A team member who is to be appointed as Project Manager has not managed any projects in the field of waste management in the last five years before the tender deadline - 0 points.
* **Proof:** The tenderer must submit with the tender **signed CVs** of the named persons, clearly indicating the required experience being assessed, **and confirmations signed by the Contracting Authority**, containing all the required information: name and description of the activity; involvement of the person to whom the confirmation refers in the implementation of the project (role/position in the project, job description); details of the Contracting Authority where the experience was gained (name of the Contracting Authority, address, contact person at the Contracting Authority – first and last name, position, email address and telephone number); date of project indication that the project was successfully completed in accordance with the contractually agreed quality.

**2.1.3.** **Experience of a Data Analyst - maximum 3 points.**

* A team member who is assigned the tasks of a Data Analyst has experience in analysing data and producing reports as part of a waste management project - 1 point is awarded for 1 project, 2 points for 2 projects and 3 points for 3 or more projects.
* A team member who is assigned the tasks of a Data Analyst has no experience in analysing data and producing reports as part of a waste management project - 0 points.
* **Proof:** The tenderer must submit with the tender **signed CVs** of the named persons, clearly indicating the required experience being assessed, **and confirmations signed by the Contracting Authority**, containing all the required information: name and description of the activity; involvement of the person to whom the confirmation refers in the implementation of the project (role/position in the project, job description); details of the Contracting Authority where the experience was gained (name of the Contracting Authority, address, contact person at the Contracting Authority – first and last name, position, email address and telephone number); date of project indication that the project was successfully completed in accordance with the contractually agreed quality.
	1. **Additional technical innovations - maximum 20 points**
* A tenderer who offers additional functionalities that go beyond the minimum requirements and technical specifications that all tenders must fulfil shall be awarded 20 points, with 5 points awarded for each additional functionality, up to a maximum of 20 points.
* A tenderer offering no additional functionalities shall be awarded 0 points.
* **Proof:** The tenderer must submit with the tender a methodology for system implementation that includes a research, development, testing and implementation plan, with a specific focus on meeting the minimum requirements, including:
* A detailed description of the proposed additional functionalities and how they relate to the minimum requirements.
* An explanation of how the proposed functionalities improve usability, system performance and sustainability.
* A development plan for additional functionality, including testing and integration with the core functionality.
	1. **Response time for technical support - 6 points**

This refers to the technical assistance that the tenderer must provide to both users/citizens and the Contracting Authority. The Contracting Authority shall determine which request falls under an urgent request and which under medium and low priority requests.

The tenderer shall receive additional points, up to a maximum of 6, for the response time to the Contracting Authority's technical support requests that are shorter than those in Section 2. Technical Specifications, as follows:

**Response Time (0-6 points)**

* Response to urgent requests:
* 0 points: Response to urgent requests within exactly 24 hours;
* 1 point: Response to urgent requests within less than 24h and more than 12h;
* 2 points: Responding to urgent requests within 12 hours or less and more than 4 hours;
* 3 points: Responding to urgent requests within 4 hours or less.
* Responding to medium and low priority requests:
* 0 points: Responding to medium and low priority requests within 5 working days;
* 1 point: Responding to medium and low priority requests within 4 working days;
* 2 points: Responding to medium and low priority requests within 3 working days;
* 3 points: Responding to medium and low priority requests within 1- 2 working days.

**2.4. Length of warranty period with technical support – maximum 10 points**

Under this criterion element, points shall be awarded based on the proposed length of the warranty period with technical support for the system according to the following scoring methodology:

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Value | Number of points | Explanation |
|  | 2 years | 0 | The minimum warranty period with technical support that the tenderer can offer is 2 years. In this case, the tenderer is awarded 0 points; if a shorter warranty period is offered, the tender shall be rejected as unacceptable.  |
|  | 3 years | 3 | The tenderer specifies in its tender the warranty period with technical support in years and is awarded 3 points for the proposed warranty period equal to the specified value. |
|  | 4 years | 6 | The tenderer specifies the warranty period with technical support in years in its tender and is awarded 6 points for the proposed warranty period in the specified value. |
|  | 5 years and above | 10 | The tenderer specifies the warranty period with technical support in years in its tender and receives 10 points for the proposed warranty period in the specified value. |

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| ***Note:*** *The criteria for the award of contracts listed here serve only as an example of how criteria can be defined and described, while the Contracting Authority defines the criteria in accordance with Articles 132 through 134a of the PPL, depending on the nature of the subject of the contract.* |

Reserve criteria on the basis of which the Public Contract is awarded in cases where two or more tenders are equal after application of the criteria:

If two or more tenders have the same score, the tender with the shortest overall time limit for completion of all phases shall be selected as the most advantageous.

If it is still not possible to make an award decision after applying the above-mentioned reservation criterion, the Contracting Authority shall award the Public Contract to the tenderer selected by drawing. The Contracting Authority shall inform all tenderers who have submitted a tender in writing of the date of the draw. Only those tenders with the same number of points and the same time period for the completion of all phases will take part in the draw. The draw is carried out publicly and in the presence of the tenderers by writing the names of the tenderers on separate pieces of paper of the same size and colour, folding all these pieces of paper and placing them in a transparent box from which one piece of paper is drawn at a time. The order in which the tenderers' names are drawn determines the ranking of the bids, i.e., the tenderer whose name appears on the paper drawn first is the highest-ranking tenderer.

Tenderers who do not take part in this procedure shall receive a record of the draw from the contracting authority.

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| ***Note:*** *The Contracting Authority may define the drawing procedure in a different manner.*  |

1. DATA USED BY APPLICANTS TO PREPARE THE APPLICATION FORM

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| ***Note:*** *Based on the data entered into the Public Procurement Portal by the Contracting Authority in the “Criteria for the award of contracts and other procurement requirements" section when preparing the procurement documents, the application form is automatically generated by the Portal.**The procurement documents contain the data used by candidates to create the application form, which contains the following general information about:* 1. *the candidate or each candidate in a group and about the subcontractors (company name or abbreviated name from the relevant register, address of the registered office, registration number and tax identification number, contact details, etc.);*
2. *the period of validity of the application, expressed in the number of days from the date of opening of applications, which may not be less than 30 days;*
3. *the subject of the public procurement;*
4. *information on the part of the Contract to be subcontracted (by subject or quantity, value or percentage), details of the subcontractor and information that the Contracting Authority shall make payments directly to the subcontractor if the subcontractor requests direct payment of claims due;*
5. *a declaration of integrity in which the candidate confirms, under full material and criminal liability, that it has submitted its application independently and without collusion with other tenderers or interested parties and guarantees the accuracy of the information in the application.*
 |

1. DATA ON THE BASIS OF WHICH THE APPLICANTS DRAW UP THE DECLARATION OF FULFILMENT OF CRITERIA FOR QUALITATIVE SELECTION OF ECONOMIC OPERATOR

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| ***Note:*** *On the basis of the data entered by the Contracting Authority in the “Criteria for qualitative selection of economic operator” section of the Public Procurement Portal when preparing the procurement documents, the declaration of fulfilment of criteria for qualitative selection of economic operator is automatically generated by the Portal. In addition, based on this data, the Portal creates a part of the procurement documents “Criteria for qualitative selection of economic operator and guidelines for demonstrating compliance with these criteria”.**If the application is submitted by a group of economic operators, a separate declaration must be submitted for each member of the group, containing information on the relevant capacities of the respective group member.* *If the economic operator intends to delegate part of the Contract to a subcontractor or to use the capacities of other operators, it must submit a separate declaration for the subcontractor or the operator whose capacities it intends to use, containing information on the relevant capacities of the subcontractor or the other operator.* *In the declaration of fulfilment of criteria, the economic operator indicates the issuers of the evidence of fulfilment of criteria for qualitative selection of economic operator and declare that they will be able to provide such evidence to the contracting authority without delay upon request.* *In the declaration of fulfilment of criteria, the economic operator may provide information on the internet address of the database, any necessary identification data and a declaration of consent to obtain or consult the evidence of compliance with the criteria for the qualitative selection of the economic operator.* |

Model of procurement documentation for the negotiation phase

1. GENERAL INFORMATION ABOUT THE SUBJECT OF THE PROCUREMENT

|  |  |
| --- | --- |
| Title: | Development of a smart waste management system  |
| Reference number: | \_\_/25 |
| Type of procurement subject: | Services |

**Type of public procurement procedure:** Partnership for Innovation

**Subject of public procurement:** Development of a smart waste management system.

**Description of the need with descriptive elements that represent the minimum requirements that the tenders must fulfil:**

#### **Description of the need**

The public procurement procedure is organised to establish an innovation partnership with a single partner[[3]](#footnote-3) for the development of a smart waste management system. The objectives to be achieved through this tender are:

1. Increasing the efficiency of waste management,

2. Increase the recycling rate,

3. Improve sustainability and environmental protection,

4. Improve the quality of service for citizens,

5. Better analysis and reporting.

To summarise, the public procurement process within the partnership for innovation aims to create a modern, sustainable and efficient waste management system that improves the quality of life of citizens and protects the environment.

#### **Elements of the description of the need that represent the minimum requirements that all tenders must fulfil**

1. **Development of an IoT system** that includes the creation and implementation of a system that utilises the “Internet of Things” for improved waste management. This process must include at least the following components:

**1)** The Tenderer is required to select appropriate **types of sensors** to be installed in the waste containers. This shall include at least the following sensors: weight sensors, ultrasonic sensors, temperature sensors, humidity sensors, material detection sensors, carbon dioxide (CO2), methane (CH4) and nitrogen oxides (NOx) sensors.

**2) Network communication** - All sensors must be connected to the central system via wireless technology (e.g., LoRaWAN, NB-IoT) to transmit data in real time. It must be ensured that the communication is secure and the data cannot be compromised.

**3) Data and analytics** - Sensors collect real-time data on the condition of the waste and send it to the central system via wireless communication. Sophisticated algorithms analyse the collected data to identify patterns, suggest optimisations and improve waste collection strategies.

**4) Integration with existing systems** - Ensure that the new solution can be integrated with existing waste management systems and other relevant technologies. Develop an API (Application Programming Interface) or other protocols that enable data exchange between different systems.

**5) Pilot project and testing** - Before wider implementation, it is necessary to carry out a pilot project in a limited geographical area to test effectiveness and identify potential problems.

**6) Maintenance and support** - Ensure regular maintenance of sensors and software to ensure their proper operation over time. Tender support to users to solve potential problems and improve the system.

1. The tenderer is obliged to **develop an application** consisting of two parts.
	* 1. **The first part is the interactive area for citizens/users**, which must include at least the following:

Registration for notifications:

* Users can register for notifications about the date and time of waste collection via push notification or email.

Service history:

* The application stores waste collection history by user address so that users can track when waste was collected and how often services were used.

Feedback form:

* Users must be able to easily provide feedback on service quality by either rating the waste collection service or commenting on their experience.
* The application should offer the possibility for users to report problems.

Registration for free workshops:

* The application should allow users to register for free educational workshops on recycling and environmental protection organised by the city.
	+ 1. **The second part of the application aims to increase the recycling rate.** This is to be achieved by allowing users to scan QR codes of packaging containing recycled materials, by providing educational content in the application and by integrating a map showing the nearest locations for the disposal of recycled materials.
1. The tenderer must ensure that the developed central system and the application contribute to **environmental protection** in at least two ways:
	* 1. by transmitting data from the application, originating from sensors measuring carbon dioxide (CO2), methane (CH4) and nitrogen oxides (NOx), to the central system;
		2. by using data collected from smart containers and container filling sensors, the system can optimise waste collection routes and reduce unnecessary journeys.
2. The Tenderer is required to **develop a centralised data collection and analysis system** that must be able to integrate data from various sources (sensors in smart containers, applications, user feedback) and allow this data to be analysed and managed. Minimum requirements for the system:
* Modular structure
* Development of an API (Application Programming Interface)
* Data security.
1. The tenderer is obliged to provide **comprehensive training for the designated persons at the Contracting Authority** as well as **technical support for the system** (regular system updates and resolution of any problems that arise during the practical operation of the system).

2. TECHNICAL SPECIFICATIONS

**NOTE:**

This Technical Specification is a detailed description of the minimum requirements that tenders must fulfil. By submitting a tender, the tenderer agrees to the Technical Specifications stated and undertakes to fulfil all the requirements listed if the contract is awarded.

#### EXISTING STATE

Existing waste management systems often face challenges such as:

1) **Inefficient waste** **collection methods** - Many traditional systems do not utilise advanced tracking and data analysis technologies, which can lead to excessive or inadequate waste collection.

2) **Lack of transparency** - Current systems are often unable to track the movement or processing of waste, making it difficult to analyse and make new decisions.

**3) Limited sustainability** - Without “smart” technologies, it is difficult to achieve sustainable waste management that minimises the impact on the environment.

4) **Insufficient use of data** - Data that could improve waste management is often underutilised, i.e., there is no analysis of where the largest amounts of waste come from, whether it is household waste, industrial waste, electronic waste, etc., nor is there an assessment of where recycling or waste reduction can be improved.

#### ****NEED FOR INNOVATIVE SOLUTIONS AND OBJECTIVES TO BE ACHIEVED THROUGH INNOVATIVE SOLUTIONS****

In order to address the problems mentioned above, the development of an innovative solution that integrates modern technologies into the waste management sector is considered necessary.

The objectives to be achieved through this procurement are:

**1. INCREASED WASTE MANAGEMENT EFFICIENCY THROUGH THE DEVELOPMENT OF IoT SOLUTIONS**

Developing an IoT system involves creating and implementing a system that utilises the Internet of Things (IoT) to improve waste management. This process should include several key components:

**1) Sensor infrastructure**

Type of sensors: The Tenderer is required to select appropriate types of sensors to be installed in the waste containers. This shall include at least the following:

* *Weight sensors:*
* Functionality: These sensors are used to measure the weight of the waste in the container. A standard solution could include the use of measuring sensors (e.g., Load Cells) that are accurate and resistant to various external conditions.
* Quantity data and notification system: When the containers reach a certain fill level (e.g. 80%), the system must automatically send a notification to the relevant waste management services to ensure timely emptying. This enables a quick response from the teams responsible for waste collection and ensures that the containers do not overflow and that no undesirable situations such as spillages or unpleasant odours occur.
* Identification of polluted areas: By tracking waste volumes in different parts of the city, the Contracting Authority can easily identify which areas are the most littered and where more active waste disposal is required.
* Optimisation of emptying frequency: Using the collected data, the Contracting Authority can better plan the routes of the vehicles for waste collection, thereby reducing costs and increasing efficiency. For example, containers that fill up quickly can be emptied more frequently, while those that fill up slowly need to be emptied less often.
* Performance monitoring: The system must be able to record how much time has elapsed between the emptying of certain containers to enable the analysis and optimisation of future waste management strategies.
* *Ultrasonic sensors:* For assessing waste levels.
* Emission of ultrasonic waves: The ultrasonic sensor should emit high-frequency sound waves (typically between 20 kHz and 40 kHz).
* Wave reflection: When the waves encounter an object, such as the surface of waste in the container, they are reflected back to the sensor.
* Time measurement: The sensor measures the time it takes for sound waves to return. Based on this time and the speed of sound, the sensor can calculate the distance to the surface of the waste.
* Level Assessment: Based on the measured distance, the sensor can determine the level of waste in the container, i.e., how full the container is.
* Ultrasonic sensors are installed at the top of the waste container, directed downwards, to record the waste level.
* When the waste level reaches a certain threshold (e.g., 80% fullness), the system must automatically notify the responsible waste management authorities to ensure timely emptying.
* *Temperature Sensors:*
* These sensors can monitor the temperature inside the waste container to identify potential changes indicating the decomposition process of organic waste.
* Elevated temperatures may signal that the decomposition process is occurring within the container, while low temperatures may indicate a cooling status.
* *Humidity Sensors:*
* These sensors monitor the humidity level inside the container.
* High humidity levels can contribute to the decomposition of organic waste and an increase in unpleasant odours, as well as attract pests.
* Monitoring humidity can assist in determining the optimal timing for emptying.
* *Material Recognition Sensors:*
* Based on this information, the system can classify waste into various categories - organic, recyclable, or non-compliant materials.
* These sensors help increase the efficiency of the recycling process by ensuring that materials are properly sorted before entering the recycling system.
* Additionally, they can identify more materials as recyclable, thereby reducing the overall amount of waste that ends up in landfills.
* Sensors for measuring carbon dioxide (CO2), methane (CH4), and nitrogen oxides (NOx):
	+ These sensors will automatically collect real-time data on emissions that may be released during waste decomposition.

Sensor Installation:

* Sensors are installed within waste containers. They must be adapted to outdoor conditions to withstand all weather conditions, and must have a lifespan of at least 5 years.

**2) Network communication**

Choice of technology:

* All sensors must be connected to the central system via wireless technology (e.g., LoRaWAN, NB-IoT) to transmit data in real time.

Data security:

* Ensure that communication is secure and that data cannot be compromised.

**3) Data and analyses**

Data collection:

* Sensors collect real-time data on the condition of the waste and send it to the central system via wireless communication.

Data analysis:

* Sophisticated algorithms analyse the collected data to identify patterns, suggest optimisations and improve waste collection strategies.

**4) Integration with existing systems**

Compatibility:

* Ensure that the new solution can be integrated with existing waste management systems and other relevant technologies.

Information Sharing:

* Develop an API (Application Programming Interface) or other protocols that enable data exchange between different systems.

**5) Pilot project and testing**

Testing the system:

* Before introducing wider use, it is necessary to carry out a pilot project in a limited geographical area to test efficiency and identify potential problems. It should show how the proposed system would work under different conditions (e.g., high demand, unfavourable weather conditions).

Gathering feedback:

* Gather feedback from users and optimise the system based on their experiences.

**6) Maintenance and support**

Maintenance plan:

* Establish regular maintenance of sensors and software to ensure their proper functioning over time.

Technical support:

* Offer support to users to solve potential problems and improve the system.

**2. APPLICATION DEVELOPMENT**

The tenderer must develop an application that allows citizens/users to easily access information about the waste collection services and all-important facts and data related to the waste. Users must be able to create personal accounts to personalise their experience. The application should be user-friendly and have clear navigation options. Users should be able to easily find information and utilise features. Users can receive push notifications about important waste collection dates, educational events or recycling campaigns in the community as well as reminders to separate waste correctly.

Multilingualism: The application must be available in Serbian and English.

The application must contain at least these two parts:

**1) Interactive part with citizens/users**

Registration for notifications:

* Users can register for notifications about the date and time of waste collection via push notification or email. This way they are informed about every scheduled collection, changes in the schedule or special actions (e.g., the collection of electronic waste).

Service history:

* The application stores waste collection history by user address so that users can track when waste was collected and how often services were used.

Feedback form:

* Users can easily provide feedback on service quality by rating the waste collection or commenting on their experience. These forms can be simple (text input) or include multiple attributes, such as: ratings from 1 to 5, selection of problem categories and additional comments.
* The application should provide the ability to report a problem, such as an overflowing container or improper collection.

Registration for free workshops:

* The application should allow users to register for free educational workshops on recycling and environmental protection organised by the city.

**2) The part of the application aims to increase the recycling rate.**

Scanning QR codes:

* The application should allow the user to scan QR codes from the packaging of recyclable materials (this is only used in cases where the product the user wishes to dispose of as waste has a QR code on it).
* These codes would provide the following information:
* information about recycling (whether the packaging is recyclable and how it can be properly disposed of or recycled);
* Education about the environmental impact of proper separation of this material;
* access to resources: where recyclable materials can be disposed of.

Educational content:

* Incorporate information about the importance of recycling, recycling processes, and the environmental benefits of proper waste separation. This can include articles, videos and graphics.

Access to recycling locations:

* Incorporate a map of the nearest locations where recyclable materials can be disposed of.

**3. IMPROVE SUSTAINABILITY AND ENVIRONMENTAL PROTECTION**

**1) Environmental monitoring**

Data collection:

* Sensors to measure the levels of carbon dioxide (CO2), methane (CH4) and nitrogen oxides (NOx), which can be released during the decomposition of waste, automatically collect data and send it to a centralised analysis system so that changes in emissions can be monitored.

Geolocation data:

* Collect geolocation data to clearly identify emission sources and identified areas that require intervention by the relevant authorities.

**2) Sustainable driving**

Optimised routes:

* Using data collected from smart containers and container filling sensors, the system can optimise waste collection routes and reduce unnecessary journeys.

Cost analysis:

* Carry out cost analyses in relation to journeys (fuel, time, vehicle maintenance costs). These analyses show how much money can be saved by reducing unnecessary journeys.

Reduce traffic-related emissions:

* Fewer journeys lead directly to a reduction in carbon dioxide and other pollutant emissions from refuse collection vehicles, contributing to better air quality in the city.

Performance monitoring:

* Continuous monitoring of the performance of the optimised routes can help to further improve the waste collection system and contribute to a more sustainable management model.

**4. DEVELOPMENT OF A CENTRALISED SYSTEM, DATA ANALYSIS AND REPORTING**

**1) Centralised data collection and analysis system**

Development of a centralised system and data collection:

* The tenderer is required to set up a centralised system that must be able to integrate data from various sources (sensors in smart containers, applications, user feedback) and allow this data to be analysed and managed.
* This system will enable efficient waste management and process optimisation.
* Mandatory system features:
* Modular design: The system will be modular so that components and data sources can be added or removed as required.
* API development: The tenderer should develop an API (Application Programming Interface) that allows the various components of the system (sensors, applications, databases) to communicate and exchange information in real time.
* Data security: Implement security protocols to protect the data collected, including user authentication, data encryption and regular system updates in response to new security threats.
* Integration of data received from sensors - All sensors in the containers send data that must be automatically collected in the centralised system.
* Integration of data received from users via the application.
* The system must be able to analyse and interpret data coming from different sources in order to generate accurate reports and analyses.

Processing and analytics:

* It is important to enable the analysis of all data stored in the centralised system, using machine learning to detect patterns or anomalies. Machine learning is a branch of artificial intelligence that enables computers and systems to learn from data and improve performance on tasks without explicit programming. In this particular case, machine learning is used to analyse data, identify patterns and detect deviations (anomalies) within a given data set.
* Key concepts of machine learning for recognising patterns and anomalies:
* Pattern recognition refers to the process that enables systems to recognise structures, patterns or similarities in data. The goal is to find regularities that can be used to classify or identify new data.
* Techniques: Various algorithms are used in machine learning, such as:
* Classification: determining the category to which a particular data pattern belongs (e.g., classification of waste types).
* Regression: Prediction of continuous values (e.g., prediction of the amount of waste based on historical data).
* Clustering: Grouping similar data without predefined labels (e.g., identifying groups of users with similar recycling habits).
* Anomaly detection focuses on identifying data that deviates significantly from the majority, which may indicate problems, errors or unusual patterns. For example, detecting improper waste disposal or unusual amounts of waste in certain time periods.
* Machine learning algorithms should be used to predict future trends in waste volumes and collection needs to enable more efficient resource planning and optimisation of operations.

**2) Key Performance Indicators (KPIs)** are quantitative or qualitative methods for measuring the success of an organisation, a project or a process in relation to defined goals and strategies. KPIs provide important insights into how performance develops over time and help with decision-making. Here you can find a more detailed overview of KPIs:

Quantity of waste by type:

* The system must measure and report the quantity of waste collected, sorted by organic, recyclable and non-permissible materials. This will help determine how much waste is effectively collected and sorted. The term “non-permissible materials” refers to materials that are disposed of in ways that are not defined by laws, regulations or waste standards and that can cause management problems, such as excessive traffic congestion or negative impacts on the environment. Monitoring these materials helps authorities to identify problems within the waste management system and develop strategies for proper disposal and recycling.

Recycling rate:

* A representation of how much of the collected materials are successfully recycled and reused in relation to the total amount of waste.

Collection efficiency:

* The percentage ratio of completed collection services to scheduled activities, including the number of missed or unnecessary trips.

Collection frequency:

* Monitoring how often each container is emptied to optimise analysis.

KPIs related to user care:

* Response time: The average time taken to respond to user enquiries.
* User satisfaction: Measured through surveys or reviews after interactions with user support.

**3) Reporting**

Reports for the users/citizens

* Monthly reporting to users on their suggestions:
* It is necessary to analyse the information received from the application users on a monthly basis. A report should then be drawn up on the most frequent comments, problems and suggestions made by citizens.
* These reports must also include information on measures taken in response to citizens' complaints, in order to increase transparency and strengthen users' trust in the competent authorities.
* Monthly reporting on the services provided to users by the competent authorities:
* Information on service improvements: The Tenderer is required to produce a report presenting the latest improvements in waste collection and recycling services to citizens. These reports may include data on route improvements, new technologies or notifications of the latest initiatives.
* Recycling Statistics: The monthly report should include statistics on recycling goals achieved, such as the quantities of material recycled relative to total waste, so citizens can understand their contribution to environmental efforts.
* Interim reports as a source of education and information:
* Once a quarter, the tenderer is required to produce a report/text/analysis that should include advice on proper waste disposal as well as the importance of recycling.
* If necessary, the reports should inform citizens about upcoming events or initiatives, such as clean-up campaigns or recycling promotion.

Report on impacts

* Emission reduction indicator: The tenderer is to produce monthly reports showing trends in the reduction of CO2 and other pollutants, as well as information on the volume of waste collected and recycled.
* Transparency and access to information: Reports should be made available to the public to increase transparency and allow citizens to learn about environmental efforts and successes in the community.
* Recommendations for improvement: Reports should include specific recommendations for optimising waste management systems based on analytical conclusions.

**5. TRAINING AND SUPPORT**

**1) Training for employees:**

Course on how to use the system:

* The tenderer shall provide in-depth training for the Contracting Authority's designated personnel to teach them how to effectively use analytical tools, interpret reports and make decisions. The training must also include a demonstration of the functionalities.

**2) Technical support:**

Regular updates:

* The system must be updated regularly to fix bugs, improve features and integrate new technologies.
* The Partner is obliged to provide technical support during the warranty period, which is at least 2 years from the commissioning of the system.

User support:

* The tenderer must provide prompt and effective technical support to resolve problems or challenges that user may face, either by phone, email or online chat.

Response time for technical enquiries from the Contractual Partner or enquiries from users/citizens:

* Responding to urgent requests - maximum 24 hours.
* Responding to medium and low priority requests - maximum 5 working days.

**PERFORMANCE AND SCALABILITY**

* The system must be optimised for cities with a population of up to 3,000,000 inhabitants.
* The system must support the simultaneous processing of data from at least 20,000 devices (sensors).
* The system must have the ability to expand processing and storage capacity without affecting the regular operation of IT services.

**SECURITY AND DATA PROTECTION**

* Implementation of standard security protocols (SSL/TLS) for communication.
* Data protection through encryption during storage (AES-256) and transmission.
* Compliance with the relevant data protection regulations (GDPR).
* Access control: Role-based access control (RBAC) for access at user level, with additional use of multi-factor authentication for system administrators.
* Access control: Access to the administration portal must be configurable in terms of defining the IP addresses from which system administration can be performed.
* Access control: The system must have the ability to record administrative sessions (Privileged Access Management).
* Backup/restore: The system must be able to create daily, weekly and monthly data backups.
* Monitoring: The system must allow administrators to view the status of key platform components (CPU utilisation, RAM, storage space, data transfer speeds, etc.) in real time and automatically generate and send email alerts if parameter values are exceeded.
* Disaster Recovery: The system must have a secure process for restoring important IT services in the event of a disaster (earthquake, flood, fire, etc.).

**DOCUMENTATION**

* The technical documentation must include:
	+ Instructions for installation, configuration and maintenance.
	+ Description of the functionalities and capabilities of the system.

**WARRANTY PERIOD AND TECHNICAL SUPPORT**

During the warranty period, the Partner is obliged to rectify all subsequently detected violations of the Contracting Authority's requirements set out in the technical specification and to resolve all incidents and problems with the operation of the system.

Technical support during the warranty period must include at least the following:

* Receiving incident and problem reports from the Contracting Authority by email or telephone;
* Regular monthly checks of the functionality and correctness of the implemented software and sensors, as well as additional checks as required, including the preparation of reports on activities carried out;
* Start resolving reported or observed incidents and problems no later than the next working day;
* Responding to Contracting Authority enquiries not covered by the system design for a total of no more than 96 MH (96 working hours)
* Updating the documentation in accordance with the changes that have occurred.

The warranty period is at least 2 years from the date of commissioning of the system. All costs related to technical support during the warranty period shall be borne by the Partner.

**PARTNER PROJECT TEAM**

The Partner is obliged to provide suitably qualified personnel to work on the project - a team with knowledge and experience, which must necessarily include persons listed in the declaration of fulfilment of criteria for qualitative selection of economic operator.

**CONTRACTING AUTHORITY PROJECT TEAM**

The Contracting Authority shall appoint the key experts for the business subject as permanent members of the project team and provide continuous support for the project. During the project, additional members shall be occasionally brought in for specific tasks.

The project team must be integrated as part of the team and as Partner. While the responsibility for the system implementation lies with the Partner, the role of the Contracting Authority team shall be to provide support and ensure all relevant information is available so that the partner can develop and implement the system in question.

1. INFORMATION ON THE CRITERIA FOR AWARDING THE CONTRACT

**Subject:** Development of a smart waste management system.

The Contracting Authority shall award the Contract under the public procurement procedure to the most economically advantageous tender on the basis of the relationship between price and quality, applying the following criteria:

|  |  |
| --- | --- |
| **Criterion** | **Points** |
| 1. | Price  | 45 |
| 2. | Quality  | 55 |
| **Total** | **100** |

Once the negotiated procedure has been completed, the Contracting Authority shall rank the acceptable final tenders according to the established criteria and award the contract to the tender with the highest overall score.

|  |
| --- |
| The total score is equal to the sum of the points for each criterion.  |
|   Bu = Bc + ∑ Bk  k | Bu - total number of points Bc - number of points for the price k - criterion Bk - number of points for the quality criterion |
|  |  |

1**. PRICE CRITERION**

|  |
| --- |
| The tender under this criterion can be awarded a maximum of 45 points. Formula for calculating the points for the price criterion: **The maximum number of points for the best value offered; other values offered are ranked in relation to the best value.**  |
|   B = minC/C x P | B - number of points for the price minC - the price of the lowest offer C - price offered P - weight value of the price |

1. QUALITY CRITERION

The tender based on the quality criterion can be awarded a maximum of 55 points.

The quality criterion consists of the criteria elements listed in the following table, each of which is given the corresponding number of points

|  |  |  |
| --- | --- | --- |
|  | **Elements of the quality criterion.** | **Points** |
| 2.1. | Quality of the personnel deployed.  | 19 |
| 2.2. | Additional technical innovations. | 20 |
| 2.3.  | Response time for technical support. | 6 |
| 2.4. | Length of warranty period with technical support. | 10 |
|  | **Total**  | 55 |

**2.1. Quality of the staff employed - maximum 19 points**

Under this criterion element, the qualitative characteristics of the persons who will be involved in the implementation of the Contract (team members) is to be evaluated, as indicated by the economic operator in the declaration of compliance with the criteria for qualitative selection of economic operators, according to the following criteria and scoring methodology:

**2.1.1. Experience of the Software Developers - maximum 10 points.**

* Each team member who has experience in the development of software solutions in the field of waste management within the last five years prior to the deadline for submission of proposals will be awarded 2 points, so that a maximum of 5 team members is awarded a total of 10 points.
* If no software developer has had experience in the development of software solutions in the field of waste management within the last five years before the deadline for submission of tenders, he/she is awarded 0 points.
* The project for which the experience is proven must have been successfully completed.
* Waste management includes any of the following activities: waste collection, waste transport, recycling, waste processing, waste disposal or waste reduction.
* **Proof:** The tenderer must submit with the tender **signed CVs** of the named persons, clearly indicating the required experience being assessed, **and confirmations signed by the Contracting Authority**, containing all the required information: name and description of the activity; involvement of the person to whom the confirmation refers in the implementation of the project (role/position in the project, job description); details of the Contracting Authority where the experience was gained (name of the Contracting Authority, address, contact person at the Contracting Authority – first and last name, position, email address and telephone number); date of project implementation; indication that the project was successfully completed in accordance with the contractually agreed quality.

**2.1.2. Experience of the Project Manager - maximum 6 points**

* A team member appointed as Project Manager must have managed projects in the field of waste management within the last five years prior to the tender deadline - 1 point is awarded for 1 project, 3 points for 2 projects and 6 points for 3 or more projects.
* A team member who is to be appointed as Project Manager has not managed any projects in the field of waste management in the last five years before the tender deadline - 0 points.
* **Proof:** The tenderer must submit with the tender **signed CVs** of the named persons, clearly indicating the required experience being assessed, **and confirmations signed by the Contracting Authority**, containing all the required information: name and description of the activity; involvement of the person to whom the confirmation refers in the implementation of the project (role/position in the project, job description); details of the Contracting Authority where the experience was gained (name of the Contracting Authority, address, contact person at the Contracting Authority – first and last name, position, email address and telephone number); date of project indication that the project was successfully completed in accordance with the contractually agreed quality.

**2.1.3.** **Experience of a Data Analyst - maximum 3 points.**

* A team member who is assigned the tasks of a Data Analyst has experience in analysing data and producing reports as part of a waste management project - 1 point is awarded for 1 project, 2 points for 2 projects and 3 points for 3 or more projects.
* A team member who is assigned the tasks of a Data Analyst has no experience in analysing data and producing reports as part of a waste management project - 0 points.
* **Proof:** The tenderer must submit with the tender **signed CVs** of the named persons, clearly indicating the required experience being assessed, **and confirmations signed by the Contracting Authority**, containing all the required information: name and description of the activity; involvement of the person to whom the confirmation refers in the implementation of the project (role/position in the project, job description); details of the Contracting Authority where the experience was gained (name of the Contracting Authority, address, contact person at the Contracting Authority – first and last name, position, email address and telephone number); date of project indication that the project was successfully completed in accordance with the contractually agreed quality.
	1. **Additional technical innovations – maximum 20 points**
* A tenderer who offers additional functionalities that go beyond the minimum requirements and technical specifications that all tenders must fulfil is awarded 20 points, with 5 points awarded for each additional functionality, up to a maximum of 20 points.
* A tenderer offering no additional functionalities is awarded 0 points.
* **Proof:** The Tenderer must submit with the tender a methodology for system implementation that includes a research, development, testing and implementation plan, with a specific focus on meeting the minimum requirements, including:
* A detailed description of the proposed additional functionalities and how they relate to the minimum requirements.
* An explanation of how the proposed functionalities improve usability, system performance and sustainability.
* A development plan for additional functionality, including testing and integration with the core functionality.
	1. **Response time for technical support - 6 points**

This refers to the technical assistance that the tenderer must provide to both users/citizens and the Contracting Authority. The Contracting Authority determines which request falls under an urgent request and which under medium and low priority requests.

The tenderer shall receive additional points, up to a maximum of 6, for the response time to the Contracting Authority's technical support requests that are shorter than those in Section 2. Technical Specifications, as follows:

**Response Time (0-6 points)**

* Response to urgent requests:
* 0 points: Response to urgent requests within exactly 24 hours;
* 1 point: Response to urgent requests within less than 24h and more than 12h;
* 2 points: Responding to urgent requests within 12 hours or less and more than 4 hours;
* 3 points: Responding to urgent requests within 4 hours or less.
* Responding to medium and low priority requests:
* 0 points: Responding to medium and low priority requests within 5 working days;
* 1 point: Responding to medium and low priority requests within 4 working days;
* 2 points: Responding to medium and low priority requests within 3 working days;
* 3 points: Responding to medium and low priority requests within 1- 2 working days.

**2.4. Length of warranty period with technical support – maximum 10 points**

Under this criterion element, points are awarded based on the proposed length of the warranty period with technical support for the system according to the following scoring methodology:

|  |  |  |  |
| --- | --- | --- | --- |
| No. | Value | Number of points | Explanation |
|  | 2 years | 0 | The minimum warranty period with technical support that the tenderer can offer is 2 years. In this case, the tenderer is awarded 0 points; if a shorter warranty period is offered, the tender is rejected as unacceptable.  |
|  | 3 years | 3 | The tenderer specifies in its tender the warranty period with technical support in years and is awarded 3 points for the proposed warranty period equal to the specified value. |
|  | 4 years | 6 | The tenderer specifies the warranty period with technical support in years in its tender and is awarded 6 points for the proposed warranty period in the specified value. |
|  | 5 years and above | 10 | The tenderer specifies the warranty period with technical support in years in its tender and is awarded 10 points for the proposed warranty period in the specified value. |

|  |
| --- |
| ***Note:*** *The criteria for the award of Contracts listed here serve only as an example of how criteria can be defined and described, while the Contracting Authority defines the criteria in accordance with Articles 132 through 134a of the PPL, depending on the nature of the subject of the contract.* |

Reserve criteria on the basis of which the Public Contract is awarded in cases where two or more tenders are equal after application of the criteria:

If two or more tenders have the same score, the tender with the shortest overall time limit for completion of all phases shall be selected as the most advantageous.

If it is still not possible to make an award decision after applying the above-mentioned reservation criterion, the contracting authority shall award the public contract to the tenderer selected by drawing. The Contracting Authority shall inform all tenderers who have submitted a tender in writing of the date of the draw. Only those tenders with the same number of points and the same time period for the completion of all phases take part in the draw. The draw is carried out publicly and in the presence of the tenderers by writing the names of the tenderers on separate pieces of paper of the same size and colour, folding all these pieces of paper and placing them in a transparent box from which one piece of paper is drawn at a time. The order in which the tenderers' names are drawn determines the ranking of the bids, i.e., the tenderer whose name appears on the paper drawn first is the highest-ranking tenderer.

Tenderers who do not take part in this procedure shall receive a record of the draw from the contracting authority.

|  |
| --- |
| ***Note:*** *The Contracting Authority may define the drawing procedure in a different manner.*  |

4. ELEMENTS OF THE CONTRACT TO BE NEGOTIATED AND THE METHOD OF NEGOTIATION

Negotiations shall be conducted in order to achieve the most advantageous conditions for the Contracting Authority for the development and subsequent acquisition of an innovative IT solution (centralised system and application) and sensors, while respecting the principles of transparency, equality of tenderers and protection of competition.

#### The aim of the negotiations is to clarify the elements of the Contract, including the technical aspects (with the exception of the minimum **requirements set out in the statement of requirements, which are the minimum standards that all tenders must fulfil and which are detailed in the technical specifications),** the deadlines, the costs and other provisions that are essential for the successful realisation of the subject of the procurement.

#### It is not permitted to negotiate beyond the minimum requirements and criteria for the award of the contract specified in the procurement documents.

ELEMENTS OF THE CONTRACT TO BE NEGOTIATED

1. **Technical specifications and functionalities of the solution:**
	* Technical feasibility of the proposed functionalities.
2. **Development and delivery schedule:**
	* Dynamics of delivery of functionalities and results.
	* Method for testing the functionalities in each phase.
	* Acceptance criteria for the results in each phase.
3. **Financial aspects:**
	* Maximum cost for each development phase, expressed as a percentage of the total contract value.
4. **Maintenance and technical support:**
	* Technical support after implementation.
	* Conditions for improvements and upgrades to the solution.
5. **Risk management:**
	* Mechanisms for dealing with potential delays and technical challenges.
	* Responsibilities of the Parties in the event of deviations from the planned results.

#### **METHOD OF NEGOTIATION**

1. **Preparation of the negotiations:** The Contracting Authority shall prepare a precise agenda for the negotiations in which the items to be negotiated shall be clearly defined.
2. **Transparency and equality:** All tenderers qualified for the negotiations shall be treated equally. Information shall be provided in a non-discriminatory manner in order to preserve competition.
3. **Phases of the negotiation:**
	* **Phase I:** Examination of the technical aspects of the tenders, clarification of technical specifications and functionalities.
	* **Phase II:** Negotiation of financial terms and deadlines.
	* **Phase III:** Finalising all elements of the contract, including acceptance criteria and system maintenance.

These shall be the most important issues that are negotiated in the individual phases. Other issues relevant to the realisation of the Contract may also be raised.

1. **Negotiation minutes:** Minutes shall be drawn up after each negotiation phase. The minutes shall contain clearly defined elements that were discussed and agreements reached, including open items for the next phases.
2. **Submission of the final tender:** Negotiations shall be concluded when agreement has been reached on all elements of the Contract. Once the negotiations have been finalised, the Contracting Authority shall invite all tenderers to submit their final tenders via the Portal.

5. DATA USED BY APPLICANTS TO PREPARE THE TENDER FORM

|  |
| --- |
| ***Note:*** *Based on the data entered into the Public Procurement Portal by the Contracting Authority in the “Criteria for the award of contracts and other procurement requirements" section when preparing the procurement documents, the tender form is automatically generated by the Portal.**The procurement documents contain the data used by tenderers to create the tender form, which contains the following general information about:* * *the tender or each tenderer in a group and about the subcontractors (company name or abbreviated name from the relevant register, address of the registered office, registration number and tax identification number, contact details, etc.);*
* *the period of validity of the tender, expressed in the number of days from the date of opening of tenders, which may not be less than 30 days;*
* *the subject of the public procurement;*
* *the price and other criteria for the award of contracts that can be expressed numerically;*
* *other procurement requirements which the Contracting Authority considers relevant for the conclusion of the contract and which can be expressed numerically;*
* *information on the part of the contract to be subcontracted (by subject or quantity, value or percentage), details of the subcontractor and information that the Contracting Authority will make payments directly to the subcontractor if the subcontractor requests direct payment of claims due;*
* *a declaration of integrity in which the tenderer confirms, under full material and criminal liability, that it has submitted its tender independently and without collusion with other tenderers or interested parties and guarantees the accuracy of the information in the tender.*
 |

1. FORM FOR THE STRUCTURE OF THE PRICE PROPOSAL

| **No.** | **Procurement subject** | **Unit of measurement\*** | **Unit** **price excluding** **VAT** | **Unit** **price including VAT**  | **Total price excluding VAT** | **Total price including VAT** |
| --- | --- | --- | --- | --- | --- | --- |
|  | **(1)** | **(2)** | **(3)** | **(4)** | **(5)** | **(6)** |
| **1.** | Phase 1  | Set  |  |  |  |  |
| **2.** | Phase 2  | Set  |  |  |  |  |
| **3.** | Phase 3 | Set  |  |  |  |  |
| **4** | Phase 4 | Set  |  |  |  |  |
| **5** | Phase 5 | Set |  |  |  |  |
| **6** | Phase 6 | Set |  |  |  |  |
| **TOTAL PRICE EXCLUDING VAT (1+2+3+4+5+6)** |  |
| **TOTAL PRICE INCLUDING VAT (1+2+3+4+5+6)** |  |

*\*The unit of measurement represents the complete realisation of the phase in accordance with the technical requirements and the description of the phase.*

**Instructions for completing the form for the structure of the proposed price:**

* In column 3, tenderers enter the unit price excluding VAT;
* In column 4, tenderers enter the unit price including VAT;
* In column 5, tenderers enter the total price excluding VAT;
* In column 6, the tenderers enter the total price including VAT;
* In the row “Total price excluding VAT (1+2+3+4+5+6)”, the tenderers enter the total value excluding VAT, which is the sum of all values from column 5;
* In the line “Total price with VAT (1+2+3+4+5+6)” the tenderers enter the total value with VAT, which is the sum of all values from column 6.
1. FORM FOR TENDER PREPARATION COSTS

In accordance with Article 138 of the PPL, the tenderer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(indicate name),* shall submit the total amount and structure of the tender preparation costs of preparing the tender, as indicated in the table:

|  |  |
| --- | --- |
| **TYPE OF COSTS** | **AMOUNT OF COSTS IN RSD** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| **TOTAL TENDER PREPARATION COSTS**  |  |

**Note:** The costs of preparing and submitting a tender are borne solely by the tenderer and cannot be reimbursed by the Contracting Authority. If the award procedure is suspended for reasons for which the Contracting Authority is responsible, the Contracting Authority is obliged to reimburse the tenderer for the costs of preparing samples or models, provided that they have been made in accordance with the Contracting Authority's technical specifications, and for the costs of procuring safety equipment, provided that the tenderer requests reimbursement of these costs in his tender.

**The submission of this form is not obligatory.**

1. CONTRACT MODEL

***NOTE:*** *The Contract Model serves as the basis for determining the contract clauses that are concluded with the most advantageous tenderer. It is modified depending on the negotiations conducted and the tender accepted. In this context, certain clauses are subsequently refined in order to regulate the required conditions in the documents.*

**AGREEMENT FOR PARTNERSHIP FOR INNOVATION**

**PP No. \_\_\_\_\_\_\_**

**Executed between:**

|  |
| --- |
|  |
| ................................................................................................ *(enter the name of the Contracting Authority)*with the registered seat in ............................................, street ......................................Tax Id number:.......................... Registration number: ........................................represented by................................................................... (hereinafter referred to as: contracting authority), |

and

................................................................................................

with the registered seat in ............................................, street ......................................

Tax Id number:.......................... Registration number: ........................................

represented
by...................................................................

(hereinafter referred to as: Partner).

**The Contracting Parties mutually agree the following:**

* that in accordance with the Law on Public Procurement (“Official Gazette of the RS”, no. 91/19 and 92/23, hereinafter: PPL), the Contracting Authority has implemented partnership for innovation for public procurement of services - development of a smart waste management system;
* that the Partner has submitted an acceptable tender no. \_\_\_\_\_ from \_\_\_\_\_\_\_, which constitutes an integral part of this contract (hereinafter referred to as: the Tender).
* that the Contracting Authority awarded the Public Contract to the Partner on the basis of Decision no. \_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_\_, published on the Public Procurement Portal on \_\_\_\_\_\_\_\_\_\_\_\_;
* *that the Partner is a group of tenderers consisting of: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, street \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ no. \_\_\_\_\_\_, represented by a Director \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (to be filled in case of a joint tender; list all members of the group of tenderers), who are jointly obliged to perform the procurement in accordance with the tender to the Contracting Authority. In this case, the selected group of tenderers is obliged to provide the Contracting Authority with the details of the bidder who will issue the invoice in the tender or after the decision to award the contract;*
* *that the Partner has partially subcontracted the execution of the procurement to one or more subcontractors: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, street \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ no. \_\_\_\_\_\_, represented by a director \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (to be filled in only in the case of a tender with subcontractors; list all subcontractors entrusted with the partial execution of the procurement).  The partner is fully responsible to the Contracting Authority for the fulfilment of the contractual obligations, regardless of the number of subcontractors.*

SUBJECT OF THE CONTRACT

Article 1

The subject of this Contract is the Development of a smart waste management system (hereinafter: System), in all respects in accordance with the requirements of the Contracting Authority as defined in the procurement documents and the Partner's tender, which form an integral part of this Contract.

This Partnership for Innovation Agreement aims to research and develop an innovative System that meets the needs and requirements set out by the Contracting Authority in the Procurement Documents. The partnership shall also include the potential purchase/implementation of the System, application and sensors for waste containers. If the Partnership is successful and the Contracting Authority decides to purchase/implement the system, this shall be done in accordance with the terms and conditions defined in the Procurement Documents and the Partner’s tender, which forms an integral part of this Contract.

PHASES AND OBJECTIVES

Article 2

Partnership for innovation is implemented in six main phases:

**PHASE 1: INITIAL PLANNING AND RESEARCH**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(To be filled out by the tenderer according to their assessment, within the maximum period defined by the Contracting Authority).*
* **Objective**: Lay the foundations for future activities and involve all relevant stakeholders.
* **Activities**:
	+ Identification of key stakeholders (local authorities, citizens).
	+ Carry out an analysis of the needs and expectations of the contracting authority and users with regard to waste management. All collected data and conclusions shall be presented in a study.
* **Preliminary objectives**:
* Collection of information on the current waste management system.
* Formation of a working group with representatives from all relevant areas.

**PHASE 2: DEVELOPMENT OF CONCEPT AND STRATEGY**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(To be filled out by the tenderer according to their assessment, within the maximum period defined by The Contracting Authority).*
* **Objective**: Develop a clear strategy and technical specifications for a smart waste management system.
* **Activities**:
	+ Develop technical specifications that define the functionalities of the smart containers, sensors, centralised system and applications.
	+ Develop a strategy to involve citizens in the recycling and waste management process.
* **Preliminary objectives**:
	+ Drafting and approval of the technical specifications and strategy.
	+ Obtaining the contracting authority's approval of the implementation plan.

**PHASE 3: PILOT PROJECT**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(To be filled out by the bidder according to their assessment, within the maximum period defined by the Contracting Authority).*
* **Objective**: Test the basic functionalities of the system at a limited number of locations.
* **Activities**:
	+ Install sensors in waste containers in selected areas.
	+ Monitor and collect data on the performance of the waste collection and recycling systems.
* **Preliminary objectives**:
* Finalise the installation of the sensors in the waste containers and start monitoring their performance.
* Gather feedback from users and analyse the results of the pilot project.

**PHASE 4: EVALUATION AND OPTIMISATION**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(To be filled out by the tenderer according to their assessment, within the maximum period defined by the Contracting Authority).*
* **Objective**: To evaluate the results of the pilot project and improve the system before full implementation.
* **Activities**:
	+ Analyse the data collected during the pilot project and identify potential problems and benefits.
	+ Involve all stakeholders in the evaluation process to obtain feedback.
* **Preliminary objectives**:
	+ Produce a Final Report with recommendations for system optimisation.
	+ Create a plan for broader implementation based on the results of the pilot.

PHASE 5: **FULL IMPLEMENTATION OF THE SYSTEM AND USER TRAINING**

* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(To be filled out by the tenderer according to their assessment, within the maximum period defined by the Contracting Authority).*
* **Objective**: Complete implementation of the intelligent waste management system at the designated locations and train users.
* **Activities**:
* Install sensors in waste containers at all planned locations.
* Develop and implement a system for analysing and visualising the collected data.
* Train the use of the system.
* **Preliminary objectives**:
	+ Start of operational support and system maintenance.
	+ Regularly collect and analyse data on the use and success of the system.
* Phase V represents a subsequent purchase of the developed system, which the Contracting Authority is not obliged to realise, so that the partnership can be terminated after completion of the Phase IV. All obligations in the procurement documents relating to Phase V must be fulfilled by the partner unless the contracting authority withdraws from phase five, of which it will be informed no later than 30 days after completion of Phase IV.

PHASE 6: **MONITORING AND CONTINUOUS IMPROVEMENT**

* Phase VI will only be implemented once Phase V has been completed.
* Estimated duration of the phase: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(To be filled out by the tenderer according to their assessment, within the maximum period defined by the Contracting Authority).*
* **Objective**: Ensure the long-term sustainability and efficiency of the system.
* **Activities**:
	+ Regularly monitor system performance and obtain feedback from citizens and employees.
	+ Improve services based on data analyses and user feedback.
* **Preliminary objectives**:
	+ Producing an annual report on the targets achieved and progress in waste management.
	+ Implement new solutions and improvements based on analysed data and user recommendations.

CONTRACT VALUE

Article 3

The agreed total price for the subject of the Contract under Article 1 hereunder is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (in words: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_), excluding VAT.

The price for each individual phase is included in the Partner’s Tender - Price Structure Form, which is an integral part of this Contract.

The price cannot be increased during the execution of the Contract.

The price shall include all dependent costs for the performance of the subject of the Contract, including, but not limited to, per diem expenses, travelling expenses, accommodation costs, insurance costs for the assigned personnel and the Partner, functional tests and all other costs arising from or related to the performance of the subject of the Contract.

METHOD OF PAYMENT

Article 4

The Contracting Authority shall pay the agreed price to the Partner in instalments on the basis of invoices (the invoice shall be issued after completion of a specific phase and confirmed by a Phase Completion Report signed by both Contractual Parties) and accompanying documents as follows:

* By paying an amount equal to 100% of the contractually agreed total price for Phase I after delivery of the study and confirmation by the Contracting Authority that the objective has been achieved and signing of the Phase Completion Report, which corresponds to an amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (value of Phase 1).
* By paying an amount equal to 100% of the contractually agreed total price for Phase 2 after the approval of the Technical Specifications and Strategy and the signing of the Phase Completion Report, which corresponds to an amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (value of Phase 2).
* By paying an amount equal to 100% of the contractually agreed total price for Phase 3 after successful completion of the pilot implementation and submission of the test report, confirmation from the Contracting Authority that the target has been achieved and signing of the Phase Completion Report, which corresponds to an amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (value of Phase 3).
* By paying an amount equal to 100% of the contractually agreed total price for Phase 4, after approval of the Report with recommendations for system optimisation and signing of the report on the Phase Completion Report, which corresponds to an amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (value of Phase 4).
* By paying an amount equal to 100% of the contractually agreed total price for Phase 5 after the final implementation, user training, confirmation of the functionality of the System and signing the Phase Completion Report - handover of the System and commissioning, which corresponds to an amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (value of Phase 5).
* By paying an amount equal to 100% of the contractually agreed total price for Phase 6, after acceptance of the Annual report on the operation of the System and signing of the Final Report, which corresponds to an amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (value of Phase 6).

All payments shall be made in phases, depending on the achievement of the defined objectives, after confirmation of the achievement of the objectives by the Contracting Authority and signing of the he Phase Completion Report, within 45 days of receipt of a valid invoice.

OBLIGATIONS OF THE PARTNER

Article 5

The Partner shall undertake to:

* Carry out the activities in accordance with the established phases, deadlines and Technical Specifications.
* Provide suitably qualified personnel to work on the project - a team with knowledge and experience, which must necessarily include persons listed in the declaration of fulfilment of criteria for qualitative selection of economic operator. Replace the named persons shall only be possible with the prior consent of the Contracting Authority and after verification of the equivalence of the replacement person (fulfilment of all criteria as the person to be replaced).
* Provide all materials, reports and documentation specified in the Contract.
* Provide technical support during the warranty period, which is at least \_\_\_\_\_\_\_.
* Apply the highest security and data protection standards, including compliance with the Law on Personal Data Protection.

TECHNICAL SUPPORT AT THE REQUEST OF THE CONTRACTING AUTHORITY

Article 6

The Partner is obliged to respond to the Contracting Authority's request for technical support within the deadlines specified in its tender.

The response time of the Partner shall be the following:

* for urgent requests is \_\_\_\_\_ h,
* for medium and low priority requests: \_\_\_\_\_\_ working days.

The Contracting Authority shall determine which request falls under an urgent request and which under medium and low priority requests.

A request is deemed to have been received from the time at which the Contracting Authority forwards it by email or, in the case of urgent tasks, by telephone during business hours.

The response time shall be the maximum time that elapses from the time the Partner receives the request to the time when a representative of the Partner must contact a representative of the Contracting Authority by telephone or email and obtain further information on the problem.

If the Partner fails to comply with the response time through its fault, it shall pay the Contracting Authority a contractual penalty of 0.1% of the total contractual value for each hour of delay in the case of urgent enquiries or for each day of delay in the case of medium and low priority enquiries. The total contractual penalty may not exceed 1% of the total contractual value.

OBLIGATIONS OF THE CONTRACTING AUTHORITY

Article 7

The Contracting Authority shall undertake to:

* Cooperate with the Partner and provide all necessary information for the realisation of the project.
* Make timely payments in accordance with Article 4 of this Contract.
* Appoint the most relevant business experts as permanent members of the project team and provide continuous support to the project, integrating them as part of the team and the Partner. While the responsibility for the system implementation lies with the Partner, the role of the Contracting Authority team shall be to provide support and ensure all relevant information is available so that the partner can develop and implement the system in question.

METHOD OF MONITORING

Article 8

The implementation of the Contract shall be monitored by a joint project team made up of representatives of the Contracting Authority and the Partner.

At the end of each phase, the project team shall submit a report on the achievement of the objectives of the respective phase.

The completion of the phase shall be confirmed by the signing of the Phase Completion Report by both Contracting Parties.

PROTECTION OF INTELLECTUAL PROPERTY RIGHTS

Article 9

The Partner shall retain all tangible and intangible rights to the software and all other results developed or produced within the framework of this partnership.

The Contracting Authority shall be granted the unrestricted, royalty-free and non-exclusive right to use, copy, modify and further develop the software and the solutions, either independently or with the help of a third party.

The source code as well as the corresponding technical specifications, instructions, licences for the free use and modification of the system and all other documents required for the use of the system must be handed over to the Contracting Authority within 10 working days after the testing of the solution, i.e., after completion of Phase 3. Pilot project.

The Contracting Authority may use the solution within the scope of its needs, including installation, implementation, training and integration with other systems, as well as the right to reproduce the number of copies of the Software Solution required for normal operation and security procedures.

The Contracting Authority shall not have the right to sell or distribute the developed solution to third parties without the Partner's prior written consent.

The Partner guarantees that the solution does not infringe the intellectual property rights of third parties established by law or international agreements. In the event of an infringement, the Partner is obliged to assume responsibility and bear the costs of protecting the Contracting Authority from any legal consequences.

WARRANTY PERIOD

Article 10

During the warranty period, the Partner is obliged to rectify all subsequently detected violations of the Contracting Authority's requirements set out in the Technical Specifications and to resolve all incidents and problems with the operation of the system.

In Phase 6, the concept of technical support during the warranty period shall be agreed. Technical support during the warranty period must include at least the following:

* Receiving incident and problem reports from the Contracting Authority by email or telephone;
* Regular monthly checks of the functionality and correctness of the implemented software as well as additional checks as required, including the preparation of reports on activities carried out;
* Start resolving reported or observed incidents and problems no later than the next working day;
* Updating the documentation in accordance with the changes that have occurred.

The warranty period shall be at least \_\_\_\_\_\_\_ years from the date of commissioning of the system (acceptance of the project team’s report on the successful commissioning and signing of the protocol on the completion of the phase). All costs related to technical support during the warranty period shall be borne by the Partner.

The Partner is obliged to have an adequate number of qualified employees for the elimination of defects during the warranty period and to provide successful support throughout the warranty period and the provision of technical support.

CONDITIONS FOR THE TERMINATION OF THE PARTNERSHIP

Article 11

Under the following circumstances, the partnership can be terminated and the contract cancelled:

#### ****1) Phase 1: Initial planning and research****

* + Failure to identify key stakeholders or engage them may lead to a loss of trust between the partners.
	+ Failure to adequately analyse user needs and expectations can lead to disagreements between the partners about the right priorities.

#### ****2) Phase 2: Development of concept and strategy****

* + Failure to develop a clear technical specifications or strategy that is aligned with the needs of all stakeholders can lead to disagreements between the partners.
	+ Non-functioning or unclear implementation plans can lead to a loss of confidence in the ability to deliver the project.

#### ****3) Phase 3: Pilot project****

* + Failure to implement the pilot project, e.g., delays in installation or poor system performance, may indicate unacceptable risks or costs.
	+ If no user feedback is obtained or negative reactions are observed, this can lead to a dilemma regarding the continuation of the partnership.

#### ****4) Phase 4: Evaluation and optimisation****

* + If the data from the pilot project is not analysed successfully or the results are not taken into account, this can lead to a loss of trust in the partnership.
	+ Inconsistencies in the optimisation recommendations or the inability to actually implement the necessary changes can lead to the termination of the partnership.

#### ****5) Phase 5: Full implementation of the system and user training****

* + Delays in testing or implementation of the system can lead to disagreements between the partners regarding expectations and resources.
	+ If the system is not installed and functioning according to specifications, this can raise serious doubts about the effectiveness of the partnership.

#### ****Phase 6: Monitoring and continuous improvement****

* + If data is not collected and user feedback is not analysed, stagnation can occur, undermining the purpose of the partnership.
	+ Disagreements about future development can lead to the termination of the partnership as there is no proactive approach to improvement.

**7) Failure to start the project or meet agreed deadlines**:

* + If a partner fails to commence or complete activities at any phase without good cause, the contracting authority has the right to terminate the contract. Delays can only be justified by force majeure events or other objective reasons that could not have been foreseen.

**8) Breach of contractual obligations:**

* + If the Partner breaches the terms of the contract, including but not limited to:
		- Breach of confidentiality of data or disruption of technical standards.
		- Inadequate co-operation with the contracting authority during the partnership phases.

FINANCIAL GUARANTEES

Article 12

The Partner shall undertake to provide the Contracting Authority with a bank guarantee as security for the fulfilment of the contractual obligations together with the signed Contract, but no later than 15 days after the date of signing the Contract. The bank guarantee must be unconditional, irrevocable, incontestable and payable on first demand, in the amount of 10% of the total contractual price (excluding VAT) with a validity period of at least 90 (ninety) days beyond the deadline for the execution of all the work agreed in the Contract.

If the deadlines for the fulfilment of the contractual obligations are extended during the term of the Contract, the Partner is obliged to extend the validity of the bank guarantee for the fulfilment of the contractual obligations. If the Partner fails to extend the validity of the bank guarantee within the specified period, the Contracting Authority may call on the bank guarantee in full and also terminate the Contract.

The bank guarantee referred to in paragraph 1 of this Article may not contain additional payment terms, shorter deadlines or a lower amount; otherwise, the Partner shall be deemed to have refused to provide the bank guarantee for the fulfilment of the contractual obligations, in which case the Contracting Authority may call on the bank guarantee for the seriousness of the tender.

The Contracting Authority may call on the bank guarantee referred to in paragraph 1 of this Article if the Partner fails to fulfil its contractual obligations under the agreed conditions, in the agreed manner and within the agreed periods and if these breaches persist despite written reminders from the Contracting Authority.

The Partner shall undertake to provide the Contracting Authority with an unconditional, irrevocable and uncontestable bank guarantee for the elimination of defects during the warranty period in the amount of 10% of the total contractual price excluding VAT with a validity period of at least 60 (sixty) days beyond the expiry of the warranty period upon signing the protocol on the completion of Phase 5.

If the warranty periods are extended, the Partner is obliged to extend the validity of the bank guarantee for the removal of defects during the warranty period. If the Partner fails to extend the validity of the bank guarantee within the specified period, the Contracting Authority may call on the bank guarantee for the rectification of defects in full during the guarantee period.

The Contracting Authority may call on the bank guarantee for the rectification of defects during the warranty period if the Partner fails to fulfil its contractual obligations to rectify defects during the warranty period despite a written warning from the Contracting Authority.

CONTRACTUAL PENALTY

Article 13

If, for reasons for which it is responsible, the Partner fails to fulfil its contractual obligations within the time limits set out in Article 2 of this Contract for each phase, thereby neglecting the proper execution of the Contract, it shall pay the Contracting Authority a contractual penalty.

The contractual penalty shall be calculated from the first day after expiry of the agreed deadline and shall amount to 0.1% of the total contract value for each commenced week of delay. The total contractual penalty may not exceed 10% of the total contractual value.

CONFIDENTIALITY

Article 14

Information obtained by the Parties in connection with this Contract and its implementation shall be considered confidential and may not be disclosed to third parties without the consent of the other party.

The Partner may not disclose any information without the prior written consent of the Contracting Authority:

* + - make available to third parties any data, information or documents received from the Contracting Authority for the performance of the Contract,
		- use the data, information or documents received from the Contracting Authority for purposes other than the fulfilment of the contractual obligations.

The Partner shall undertake to keep the data/documents received from the Contracting Authority or obtained during the work as a business secret even after the termination of the contractual obligations, in accordance with the provisions of this contract and the regulations of the Republic of Serbia.

The obligation of confidentiality shall not prevent the use of information if there is no legitimate interest in keeping it secret (e.g., if it is publicly available).

FORCE MAJEOUR

Article 15

Force majeure shall refer to events occurring after the entry into force of this Contract, regardless of the will of the Contracting Parties, which were not foreseeable at the time of signing this Contract and which, by their effects, delay or prevent the fulfilment of all or part of the contractual obligations.

The effect of force majeure shall be reflected in the extension of the agreed deadline in proportion to the duration of its effect, including a reasonable time necessary to prepare for the continuation of the fulfilment of the contractual obligations, which the Contracting Parties shall agree on.

The Contracting Party affected by force majeure shall immediately inform the other Contracting Party in writing of the occurrence of unforeseen circumstances and provide appropriate evidence.

The Contracting Party that is in default with the fulfilment of its contractual obligations may not invoke force majeure.

During the period of force majeure, the contractual obligations of both Parties shall be suspended and no sanctions provided for in this contract shall be applied.

If the force majeure lasts longer than three months, the Party not affected by the force majeure may terminate the contract.

FINAL PROVISIONS

Article 16

The Contracting Parties agree that the provisions of the Law of Contract and Torts shall apply to matters not provided for in this Contract.

 All disputes arising from the execution of this contract shall be settled amicably by the authorised representatives of the Contracting Parties.

If the dispute cannot be settled amicably, it shall be settled by the Commercial Court in Belgrade.

The Contract shall enter into force on the day of signing by the authorised representatives of both Contracting Parties.

The Contract shall be drawn up in 6 identical copies, of which each Party shall keep 3 copies.

 **CONTRACTING AUTHORITY PARTNER**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. INSTRUCTIONS FOR TENDERERS TO CREATE A TENDER

**Information about the Contracting Authority**

|  |  |
| --- | --- |
| Contracting authority: | *(The Portal retrieves the specified data)* |
| Tax Identification Number (TIN): | *(The Portal retrieves the specified data)* |
| Address: | *(The Portal retrieves the specified data)* |
| Web site: | *(The Portal retrieves the specified data)* |

**Basic information about the procedure**

|  |  |
| --- | --- |
| Name of the procedure | **Development of a smart waste management system** |
| Reference number: | *(The Portal retrieves the specified data)* |
| Type of data: | **Partnership for Innovation** |
| Type of procurement subject: | **Services** |
| Description: | *(The Portal retrieves the specified data)* |
| Submission Deadline: | *(The Portal retrieves the specified data)* |

Characteristics of the public procurement procedure

*(if applicable)*

**Description of subject / lots**

**Development of a smart waste management system**

**Procurement description:**

*(The Portal retrieves the specified data)*

The Contracting Authority has defined the criteria for the award of the contract based on:

*(The Portal retrieves the specified data)*

Method of ranking acceptable tenders:

*(The Portal retrieves the specified data)*

**Electronic communication and data exchange on the Public Procurement Portal**

The procedure requires electronic communication.

Tender/applications must be submitted via the Public Procurement Portal in the manner described in these instructions.

A user interested in the procurement procedure communicates with the Contracting Authority exclusively via the Public Procurement Portal.

A user of the Public Procurement Portal may express their interest in the published public procurement procedure by downloading the tender documents or by expressing their interest.

The documentation for this public procurement procedure on the Public Procurement Portal can be accessed on the procedure page:

***https://jnportal.ujn.gov.rs/***

Actions in the public procurement procedure that you can perform on this procedure page:

* **sending** **requests for additional information or clarification of procurement documents**, as well as **pointing out to the Contracting Authority any deficiencies and irregularities found in the procurement documents**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1246/Zahtev-za-dodatnim-informacijama-ili-poja%C5%A1njenjima-u-vezi-sa-dokumentacijom-o-nabavci)

* forming **a group of tenderers**

Please see general instructions for users of the Portal

* preparing and submitting a **tender**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1271/Priprema-i-podno%C5%A1enje-ponuda-i-prijava-putem-Portala)

* **completing the electronic declaration of fulfilment of criteria for qualitative selection of economic operator**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1280/e-Izjava-o-ispunjenosti-kriterijuma-za-kvalitativni-izbor-privrednog-subjekta)

* **granting rights to the procedure** (*to a person in the economic operator*)

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1284/Dodela-prava-na-postupak-%E2%80%93-ponu%C4%91a%C4%8Di)

* submitting **a request for protection of rights**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1352/e-Zahtev-za-za%C5%A1titu-prava)

* granting the authority to a representative for **representation in the procedure for protection of rights**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1349/Punomo%C4%87nik-u-postupku-za%C5%A1tite-prava)

Economic operators may request additional information or clarifications from the Contracting Authority on the procurement documents via the Public Procurement Portal and notify the Contracting Authority if they believe that the procurement documents contain deficiencies or irregularities. This must be done no later than **8** *(dates specified by the Contracting Authority)*days before the deadline for submission.

**E-mail box in the procedure**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1220/Sandu%C4%8De)

The user interested in the public procurement procedure will receive the following information via the email box on the Portal:

* Modification to the tender documents
* Additional information or clarifications to the tender
* Changes to the electronic catalogue
* Decision on the award / suspension
* Published notices on public tenders

The user, i.e., the economic operator participating in the procedure, receives via the email inbox on the Portal

* Confirmation of the successfully submitted application
* Confirmation of the successfully submitted modification / addition / application
* Confirmation of the withdrawal of the application
* Invitation to submit tender
* Invitation to participate in the e-auction
* Protocol of the tender opening

The user receives copies of the messages to the email address with which he/she registered on the Portal.

**Preparation and submission of the tender / application**

The economic operator prepares the tender / application on the Public Procurement Portal in accordance with the structure and content specified by the Contracting Authority when preparing the public procurement procedure on the Portal.

The economic operator submitting the application must be registered on the Portal with at least one, but preferably several users (user accounts).

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1291/Upravljanje-podacima-o-organizaciji-i-korisni%C4%8Dkim-nalozima-%E2%80%93-ponu%C4%91a%C4%8Di)

A tenderer who has independently submitted a tender cannot simultaneously participate in a joint tender or as a subcontracting authority, nor can the same person participate in multiple joint tenders.

A tenderer may submit only one tender unless allowed or required to submit a tender with variants.

Detailed instructions for preparing a tender via the Portal:

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1276/Priprema-i-podno%C5%A1enje-ponude-u-otvorenom-postupku)

**The deadline for tender submission is:** *(The Portal retrieves the specified data)*

**Applications can be submitted in: Serbian** *(the information is provided by the Contracting Authority.)*

The tenderer/applicant must confirm in the tender/application form with a declaration of integrity under full material and criminal responsibility that its tender/application was submitted independently and without collusion with other tenderers/applicants or interested parties, and guarantee the accuracy of the data in the tender/application.

**Preparation and submission of a joint tender/application**

On the public procurement page of the Portal, an economic operator can create a group of economic operators (contracting authorities/applicants) for the submission of a joint tender/application.

A member of the group of economic operators submitting the tender / application must be authorised to submit the joint tender / application on behalf of the group. Authorisation to submit the tender / application on behalf of the group of economic operators is granted by the group members via the Public Procurement Portal. All group members must be registered users of the Public Procurement Portal.

More about forming a group of economic operators:

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1272/Formiranje-grupe-ponu%C4%91a%C4%8Da-i-podno%C5%A1enje-ponude-u-ime-grupe-ponu%C4%91a%C4%8Da)

The tender / application shall be prepared and submitted by the member of the group who is authorised to submit the joint tender / application on behalf of the group of economic operators.

In the case of a joint tender / application, the data on the group members are part of the tender / application form.

When completing the Group Tender Form in the Public Procurement Portal, the value or percentage of the procurement value and the subject or quantity of procurement items that each group member will perform under the agreement should be indicated. When completing the application form for group applicants, this data is provided if it is known.

All members of the group of economic operators must complete the declaration of fulfilment with criteria for qualitative selection of economic operator.

**Preparation of the tender / application with a subcontractor**

If the tender / application involves subcontractors, they must be registered as users of the Public Procurement Portal, but are not required to give consent to the economic operator to submit the tender / application via the Portal.

An economic operator that intends to subcontract part of the contract performance is obliged to provide the following information for each individual subcontractor:

1. the subcontractor's data (*name of the subcontractor, address, registration number, tax identification number, name of the contact person*).
2. data on the part of the contract awarded to the subcontractor (*by subject or quantity, value or percentage*).
3. whether the subcontractor requires the Contracting Authority to settle directly any overdue receivables for the part of the contract it has performed.

The economic operator must provide a declaration of fulfilment with qualitative selection criteria for each subcontractor in the tender / application.

**Preparation of the documents in the tender / application**

The economic operator uploads the tender/application documents in accordance with the specified structure. The supported formats and document sizes are specified in the Guidelines for the use of the Public Procurement Portal. If a document exceeds the size allowed in the Public Procurement Portal, it is recommended to compress the document or divide it into smaller parts and upload smaller and/or compressed documents to the Public Procurement Portal.

The documents uploaded as part of the tender / application must not be encrypted by the economic operator. The Public Procurement Portal encrypts the tenders/applications and their parts and shall maintain the confidentiality of the content of the tenders/applications and the information on the identity of the economic operator until the date and time of the opening of the tenders.

The economic operator can prepare the documents it wishes to attach to the tender/application and upload them to the Portal (Procedure page  Tenders or applications  Document preparation).

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1276/Priprema-i-podno%C5%A1enje-ponude-u-otvorenom-postupku?anchor=7.-učitajte-dokumente-koje-prilažete-uz-ponudu)

**The Contracting Authority requires the tenderer to submit the following documents with its APPLICATION:**

* Application form;
* Declaration of fulfilment of qualitative selection criteria for economic operator;

**The Contracting Authority requires the tenderer to submit the following documents with its TENDER:**

* Tender Form;
* Tender price structure form;
* Tender preparation costs form (*submission of this form is not mandatory)*;
* Tender form filled out and signed;
* A methodology for system implementation that includes a research, development, testing and implementation plan, with a specific focus on meeting the minimum requirements;
* Proof of the award criteria specified in the tender documents;
* A guarantee of the seriousness of the tender.

With each requested document, the economic operator can upload several documents if the document consists of several parts.

When uploading documents to the Public Procurement Portal, the economic operator indicates whether a given document in the tender is confidential (in accordance with Article 38 of the Law on Public Procurement), indicates the legal basis on which the documents are marked as confidential and explains the reason(s) for confidentiality. If a given document contains only certain confidential parts, the economic operator must, before uploading this document to the Portal, extract the confidential parts to a separate document, mark it as confidential and upload it to the Public Procurement Portal. Parts that are not confidential must be split into a separate document or several documents and uploaded to the Public Procurement Portal. No part of the electronic tender / application is signed, a stamp is not required, nor is it necessary to scan documents.

**Declaration of fulfilment of qualitative selection criteria for economic operator**

The declaration of fulfilment of criteria for qualitative selection of economic operator is completed electronically on the Portal.

The part of the tender documentation **Criteria for qualitative selection of economic operator with instructions** is created via the Portal and attached to the tender documentation.

Method of completing the e-declaration via the Portal:

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1280/e-Izjava-o-ispunjenosti-kriterijuma-za-kvalitativni-izbor-privrednog-subjekta)

The declaration is completed via the Portal in accordance with the defined criteria on the procedure page under

Applications / Offers  New declaration or declarations in preparation for updating the declaration.

Group members, subcontractors or other entities whose capacities the economic operator uses fill in their own e-declaration and the economic operator can download the completed e-declaration via the Portal and attach it to the tender/application.

**Parts of the tender / application that cannot be submitted electronically**

If a part or parts of the tender/application cannot be submitted electronically via the Public Procurement Portal (please see Article 45, paragraph 3 of the Law on Public Procurement), the economic operator must indicate in the tender/application the exact part or parts of the tender/application that will not be submitted electronically.

The part or parts of the tender/application that cannot be submitted electronically via the public procurement Portal must be submitted by the economic operator within the deadline for submission of tenders/applications by post, courier service or directly to the contracting authority in an envelope or box sealed in such a way that it can be safely verified that it is being opened for the first time.

The part or parts of the tender / application that cannot be submitted electronically via the Public Procurement Portal must be sent to the following address:

*(The Portal retrieves the specified data)*

With the note:

Part of the tender / application for public procurement: **Development of a smart waste management system**

DO NOT OPEN

When preparing the tender / application in the Portal, the economic operator indicates the part or parts of the tender/application that will be submitted by non-electronic means (by post, courier service or directly).

The name and address of the economic operator must be indicated on the back of the envelope or on the box. If part or parts of the tender / application are submitted by a group of economic operators, the envelope must indicate that it is a group of economic operators and list the names and addresses of all members of the group.

The part or parts of the tender / application will be deemed to have been submitted on time if they are received by the Contracting Authority by (*the Portal retrieves the specified dates*).

The Contracting Authority issues an acknowledgement of receipt to the economic operator. The acknowledgement of receipt states the date and time of receipt.

The part or parts of the tender / application that the Contracting Authority did not receive within the deadline set for submitting tenders/applications, or which were received after the expiration of the day and hour by which tenders / applications could be submitted, will be considered untimely. Untimely parts of the tender/application will be returned unopened to the tenderer after the completion of the opening procedure, with the note that they were submitted untimely.

**Filling out the tender form**

The price is expressed in dinars, with and without value-added tax, including all costs incurred by the tenderer in carrying out the public tender in question.

**Other procurement requirements:**

1. **Warranty period and technical support**

**Minimum value of 2 years**

1. **Response time for technical support.**
* Responding to urgent requests - maximum 24 hours.
* Responding to medium and low priority requests - maximum 5 working days.

**Application of Drawing**

If, after ranking based on the award criteria and the secondary criterion, it is not possible to make a decision on the contract award, the contracting authority shall award the public procurement contract to the bidder selected by drawing. The Contracting Authority shall inform all tenderers who have submitted a tender in writing of the date of the draw. Only those tenders with the same number of points and the same time period for the completion of all phases will take part in the draw. The draw is carried out publicly and in the presence of the tenderers by writing the names of the tenderers on separate pieces of paper of the same size and colour, folding all these pieces of paper and placing them in a transparent box from which one piece of paper is drawn at a time. The order in which the tenderers' names are drawn determines the ranking of the bids, i.e., the tenderer whose name appears on the paper drawn first is the highest-ranking tenderer.

Tenderers who do not take part in this procedure shall receive a record of the draw from the contracting authority.

**Payment method and deadline:** The Contracting Authority is obliged to make payment to the Partner's account within 45 (forty-five) days of receipt of a correct invoice and complete payment documents for the phases.

**The tender must be valid for 90 days from the date of opening of tenders.**

After entering all the data, the economic operator shall generate the tender / application form and may verify the bid/application data before submitting the bid/application.

**Procedure for modifying and supplementing the tender / application**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1273/Ponuda-izmena-dopuna-ili-odustanak)

**Procedure for withdrawing the tender application**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1273/Ponuda-izmena-dopuna-ili-odustanak)

Information on the nature, content, method of submission, amount and time limits for ensuring fulfilment of tenderers' obligations

**Means of ensuring the seriousness of the tender:**

The tenderer undertakes to submit a blank bill of exchange together with the tender as a means of ensuring the seriousness of the tender.

The bill of exchange must be registered in the Register of Bill of Exchange and Powers of Attorney of the National Bank of Serbia and signed by an authorised representative with an original signature (not a facsimile). Together with the bill of exchange, a duly completed and signed bill of exchange authorisation letter must be submitted, containing the “non-contest” clause in the interest of the seriousness of the tender and stating an amount equal to 3% of the tender value excluding calculated VAT, as well as a confirmation of the registration of the bill of exchange (a listing from the NBS website, as proof that the bill of exchange is registered). A copy of the certified OP form and a copy of the deposited signature card issued by the commercial bank indicated by the tenderer in the bill of exchange authorisation must also be submitted with the bill of exchange. In the event of a change of the person authorised to represent the tenderer, the bill of exchange authorisation remains valid. The signature of the authorised representative on the bill of exchange and the bill of exchange authorisation must be identical to the signature on the deposited signature card.

The security instruments for the seriousness of the offer - bill of exchange, direct bond authorisation, deposited signature card and OP form - must be handed over to the Contracting Authority at the address given (*give precise instructions on how to hand over the securities*).

The validity period of the financial security is at least 90 (ninety) days from the date of the tender opening.

Should the deadlines for the selection of the tenderer change during the procedure, the validity of the financial security must be extended.

The tenderer with whom the Contract is to be concluded is obliged to extend the security for the seriousness of the tender until it is replaced by a security for the fulfilment of the contractual obligations.

The Contracting Authority shall honour the bill of exchange submitted with the tender if, during the period of validity of the tender, the tenderer withdraws from the tender, fails to prove fulfilment of criteria for qualitative selection of economic operator pursuant to Article 119 of the Law on Public Procurement, unjustifiably refuses to conclude the contract or fails to provide security for the fulfilment of the contractual obligations.

Tenderers who are not selected will have the security returned to them at their request after conclusion of the Framework Agreement with the selected tenderer.

If the tenderer does not submit the bill of exchange, the tender will be rejected as unacceptable.

**Security instrument for the fulfilment of contractual obligations:**

The Partner who is awarded the Contract shall undertake to provide the Contracting Authority with a bank guarantee as security for the fulfilment of the contractual obligations together with the signed contract, but no later than 8 days after the date of signing the Contract. The bank guarantee must be unconditional, irrevocable, incontestable and payable on first demand, in the amount of 10% of the total contractual price (excluding VAT) with a validity period of at least 90 (ninety) days beyond the deadline for the execution of all the work agreed in the Contract. If the deadlines for the fulfilment of the contractual obligations are extended during the term of the contract, the Partner is obliged to extend the validity of the bank guarantee for the fulfilment of the contractual obligations. If the Partner fails to extend the validity of the bank guarantee within the specified period, the Contracting Authority may call on the bank guarantee in full and also terminate the Contract. The bank guarantee may not contain additional payment terms, shorter deadlines or a lower amount; otherwise, the Partner shall be deemed to have refused to provide the bank guarantee for the fulfilment of the contractual obligations, in which case the Contracting Authority may call on the bank guarantee for the seriousness of the tender. The Contracting Authority may call on the bank guarantee for fulfilment of contractual obligations if the Partner fails to fulfil its contractual obligations under the agreed conditions, in the agreed manner and within the agreed periods and if these breaches persist despite written reminders from the Contracting Authority.

**Security instrument for the removal of defects in the warranty period:**

The Partner who was awarded the Contract shall undertake to provide the Contracting Authority with an unconditional, irrevocable and uncontestable bank guarantee for the elimination of defects during the warranty period in the amount of 10% of the total contractual price excluding VAT with a validity period of at least 60 (sixty) days beyond the expiry of the warranty period upon signing the protocol on the completion of Phase 5. If the warranty periods are extended, the Partner is obliged to extend the validity of the bank guarantee for the removal of defects during the warranty period. If the Partner fails to extend the validity of the bank guarantee within the specified period, the Contracting Authority may call on the bank guarantee for the rectification of defects in full during the guarantee period. The bank guarantee may not contain additional payment terms, shorter deadlines or a lower amount; otherwise, it is deemed not to have been submitted. In this case, the Contracting Authority may call on the bank guarantee for the proper fulfilment of the contract. The Contracting Authority may call on the bank guarantee for the rectification of defects during the warranty period if the Partner fails to fulfil its contractual obligations to rectify defects during the warranty period despite a written warning from the Contracting Authority.

**Opening of tenders / applications**

**Details of the opening of tenders / applications as stated in the invitation**

Date: *(The Portal retrieves the specified data)*

Venue: *(The Portal retrieves the specified data)*

**Details of the authorised persons and the procedure for opening:**

The Contracting Authority has not excluded the public from the tender opening procedure. The tenderer can follow the countdown to the opening of tenders on the page Tenders  Opening of tenders. After the Portal has opened the tenders, a record of the opening of tenders is created, which can be downloaded from the procedure page and is sent to the tenderers at the same time.

**Explanatory notes on the tender/application, the form and the method of submitting supporting proofs**

After the opening of tenders/applications, the Contracting Authority may request additional clarifications to assist in the review, evaluation and comparison of tenders / applications and may also carry out a check (inspection) on the tenderer or its subcontractor.

If the data or documents provided by the economic operator are incomplete or unclear, the Contracting Authority may, in compliance with the principles of equal treatment and transparency, request the economic operator to provide the necessary information or additional documents within a reasonable period of at least five days via the Public Procurement Portal.

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1308/Komunikacija-naru%C4%8Dioca-i-ponu%C4%91a%C4%8Da-nakon-otvaranja-ponuda)

**Protection of rights**

A request for the protection of rights may be filed by an economic operator or a tenderer who had or has an interest in the award of a contract in a specific public procurement procedure and who states that he/she has been harmed or that harm may arise due to actions of the Contracting Authority that violate the provisions of the Law on Public Procurement (hereinafter: the applicant).

A request for the protection of rights is submitted electronically via the Public Procurement Portal simultaneously to the Contracting Authority and the Republic Commission for the Protection of Rights in Public Procurement Procedures (hereinafter: the Republic Commission), with the date of submission via the Public Procurement Portal being deemed the date of receipt.

**Filing a request for protection of rights by electronic means**

[Please see general instructions for users of the Portal](https://gizsr.visualstudio.com/Uputstva/_wiki/wikis/Uputstva/1344/Za%C5%A1tita-prava-na-Portalu)

Steps:

* Enter the reference number of the application
* The data on the applicant, the Contracting Authority and the proceedings for which the application is being filed are automatically retrieved from the system
* If the applicant is acting through a lawyer in the procedure, it can authorise the lawyer via the Public Procurement Portal
* If the application is submitted on behalf of a group of tenderers, the applicant must upload the authorisation of the other group members or an agreement stating that they are authorised to submit the application on behalf of the group
* Indicate whether the request for protection of rights relates to the procurement item as a whole or to a specific batch of the procurement item (indicate lots)
* Documents that need to be uploaded from your computer:
	+ Document of the application for protection of rights (you can also upload additional documents together with the application)
	+ Proof of payment of the fee.

**Precise information on the time limits for the protection of rights**

The request for the protection of rights can be filed in the course of the whole public procurement procedure, except otherwise stipulated by the PPL, and the latest within ten days from the notification of the Contracting Authority’s web page on the termination of the public procurement procedure in line with the PPL. The request for the protection of right disputing actions of the Contracting Authority in relation with setting certain type of the procedure, content of the public call and Tender Documentation shall be deemed timely if received at the latest 3 (three) days after the expiry of the deadline for the submission of tender, irrelevant of the way of service. The request for the protection of rights against measures taken by the Contracting Authority after the deadline for submission of tenders must be submitted within ten days from the date of publication of the Contracting Authority's decision on the Public Procurement Portal, or from the date of receipt of the decision in cases where publication on the Public Procurement Portal is not provided for in the PPL. After the expiry of the deadline for the submission of the request for the protection of rights, the Applicant cannot correct his request by presenting reasons regarding the action subject of disputing in the filed request or disputing any other actions of the Contracting Authority he was or could have been aware of before the expiry of the deadline for the submission of request for the protection of rights, which he failed to state in the filed request.

The request for the protection of rights cannot be used to dispute actions undertaken by the Contracting Authority in the public procurement procedure if the Applicant knew or could have known the reasons for his submission before the expiry of the deadline for submission of requests, and the Applicant failed to do so before the expiry of the deadline. If the request for the protection of rights was refiled by the same Applicant within the same public procurement procedure, such request cannot dispute any actions of the Contracting Authority the Applicant was aware or could have been aware of at the time of filing the previous request. The subject of disputing in the protection of rights in public procurement procedure cannot be possible faults or irregularities in documentation of procurement which were not indicated before in line with Article 97 of the PPL. The contracting authority shall publish a notification regarding the submitted request for protection of rights on the Portal of Public Procurement no later than the next day after receipt of the request for protection of rights. By filing the request for the protection of rights the Contracting Authority shall stay the continuation of the public procurement procedure. The request for the protection of rights contains the data referred to under Article 217 PPL.

If the applicant undertakes his action in the procedure via his proxy, he should file along with the request for the protection of rights the adequate power of attorney. The Applicant with his domicile or residence, i.e., registered seat abroad, he is obliged to appoint along with his request for the protection of rights his proxy authorised to receive writs in the Republic of Serbia, stating all the data necessary for the communication with the indicated person.

When filing the request for the protection of rights before the Contracting Authority, the Applicant is obliged to file Proof on paid fee.

The Proof is considered any document proving the transaction was executed amounting to the amount referred to under Article 225 of the PPL and that it refers to the subject request for the protection of rights.

A valid proof of payment of the fee in accordance with the Instructions on payment of fees for filing requests for the protection of rights before the Republic Commission is published on the website of the Republic Commission.

The fee amounts to 120,000 dinars.

1. The Contracting Authority has the option of entering into a partnership for innovation with several partners by carrying out separate research and development activities (Article 60, paragraph 5 of the PPL). [↑](#footnote-ref-1)
2. As part of the procedure for setting up a partnership for innovation, the Contracting Authority may also conclude a Framework Agreement on the basis of which individual Contracts are concluded for each phase of the partnership. [↑](#footnote-ref-2)
3. The Contracting Authority has the option of entering into a partnership for innovation with several Partners by carrying out separate research and development activities (Article 60, paragraph 5 of the PPL). [↑](#footnote-ref-3)