**MARKET RESEARCH APPLICATION**

Development of a validator management and monitoring system, supply of validators and maintenance of the validator system (level 2and level 3support).

Deadline for submission of the application: \_\_\_ \_\_\_\_\_\_\_\_\_\_\_ 2024

**1.** Market research participant:

**1.1.** Information about the market research participant.

|  |  |
| --- | --- |
| **Firm name of the company** |  |
| **Registration number** |  |

**1.2.** Contact person of the market research participant.

|  |  |
| --- | --- |
| **Name, surname** |  |
| **Position held** |  |
| **Telephone number** |  |
| **Electronic mail address** |  |

hereinafter – participant

**2.** General information about the participant

**2.1.**The participant is interested in participating in the planned procurement procedure;

 Yes;

 No, because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Please specify any hindrances or obstacles to the submission of the tender:

**2.2.** The participant has reviewed the technical specification and acknowledges that it is able to perform such in due quality and in line with the requirements:

 Yes;

No, because the technical specification needs to be improved (please provide your comments in Appendix 1 – Technical specification).

**2.3.**Attraction of subcontractors:

the participant hereby confirms that the service or supply will be provided independently without the use of subcontractors;

the participant hereby informs that it is planned to attract subcontractors (including self-employed persons) for the provision of the service or implementation of the supply:

|  |  |  |
| --- | --- | --- |
| **Firm name and registration number/name, surname** | **Tasks to be assigned** | **Part of the contractual amount to be assigned in monetary terms** |
|  |  |  |

**2.4.**Information about the participant’s experience. The tenderer has, during the previous 5 (five) years (2019, 2020; 2021, 2022 and 2023, and 2024 up to the submission of the tender) carried out/implemented:

2.4.1. the supply of validators corresponding to Directive 2014/53/EU of the European Parliament and of the Council in public transport, the development or customisation of the management and monitoring system (in accordance with Clause 1.2.3 of the Technical Specification – Monitoring – System information system for the online management and control of validators (software)) according to the needs of the Contracting Authority, and has delivered, within the scope of at least one contract, 1,000 (one thousand) validators, submitting references regarding the fulfilment of the contract:

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Contracting Authority (contact person, telephone number and e-mail)** | **Service and supply, description, year of fulfilment, scope thereof** | **Total contractual price** |
| **1.** |  |  |  |
| **2.** |  |  |  |

2.4.2. a project for the implementation or customisation of a validator management and monitoring system using the following technologies; if an equivalent technology is specified, compatibility with other technologies shall be specified:

* Integration with payment modules;
* IT infrastructure environment MS *Azure – Kubernetes services, Container Registry, PostgreSQL*;
* Software delivery environment – *Git* and *Docker*;
* API for *RESTful* architectural style;
* Integration with external information systems, via *GTFS*;
* In line with the EU vehicle compatibility requirements:

|  |  |  |  |
| --- | --- | --- | --- |
| **Contracting Authority (contact person, telephone number and e-mail)** | **Subject of the project, brief description** | **Period** | **Technology used** |
|  |  |  |  |
|  |  |  |  |

2.4.3. certification of validators for payment purposes if required by the laws and regulations of the country where the validators are installed;

2.4.4. maintenance of a validator management and monitoring system for a minimum of 2 (two) years (uninterrupted).

Please indicate any hindrances or obstacles as regards the requirements for experience:

**2.5.** The tenderer shall provide the following team of experts for the fulfilment of the contract:

* at least one (1) programmer who, during the previous 5 (five) years (2019, 2020; 2021, 2022 and 2023 and 2024 up to the submission of the tender), has developed or customised a validator management and monitoring system that has been used for the concurrent management of at least 1,000 validators;
* one (1) project manager who, during the previous 5 (five) years (2019, 2020; 2021, 2022 and 2023 and 2024 up to the submission of the tender), has had experience in the supply of validators (at least 1,000 (one thousand) validators per contracting authority), implementation of the project of a management and monitoring system that has been used for the concurrent management of at least 1,000 (one thousand) validators, including training, integration with third-party systems:

|  |  |  |
| --- | --- | --- |
| **Name Surname of the expert** | **Experience of the expert, brief description of the project** | **Period and number of validators served** |
|  |  | **\_\_ \_\_\_ \_\_\_\_ - \_\_ \_\_ \_\_\_\_**  **number of validators: \_\_\_\_\_\_\_** |
|  |  | **\_\_ \_\_\_ \_\_\_\_ - \_\_ \_\_ \_\_\_\_**  **number of validators: \_\_\_\_\_\_\_** |

Please indicate any hindrances or obstacles as regards the requirements for the experience of experts and the number thereof:

**2.6. Economic and financial capabilities:**

|  |  |  |
| --- | --- | --- |
| **Total turnover of the tenderer** | **Year** | |
|  | 2023 | |
|  | 2022 | |
|  | 2021 | |
| **Positive equity according to the latest approved annual statement** | | Compliant  Non-compliant |
| The **liquidity ratio** (Balance sheet item “Total Current Assets” divided by “Total Short-term Creditors”) **according to the latest approved annual statement is at least 1** | | Compliant  Non-compliant |

**3.**Tender

**3.1. Term:** Services are provided within the following terms:

3.1.1. System development within a maximum of 3 (three) months;

3.1.2. Maintenance works, including development work (changes upon request of the Contracting Authority) – within 54 months following the signing of the Transfer and Acceptance Deed.

3.1.3. Supply of validators:

3.1.3.1. first batch of 12 pcs – within 2 months;

3.1.3.2. second batch of 1,500 pcs – within 4 months;

3.1.3.3. third batch of 1,488 pcs – within 6 months;

We consider that it is possible to develop or customise the system within the term set out in Clause 3.1.1;

We consider that it is not possible to develop or customise the system within the term set out in Clause 3.1.1;

We consider that it is possible to perform the maintenance works, including the development works, within the term set out in Clause 3.1.2;

We consider that it is not possible to perform the maintenance works, including the development works, within the term set out in Clause 3.1.2;

We consider that it is possible to supply the validators within the term set out in Clause 3.1.3.1;

We consider that it is possible to supply the validators within the term set out in Clause 3.1.3.2;

We consider that it is possible to supply the validators within the term set out in Clause 3.1.3.3;

We consider that it is not possible to supply the validators within the term set out in Clause 3.1.3.1, 3.1.3.2 and 3.1.3.3.

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| *Please indicate your preferred time for service provision (in months) from the date of conclusion of the contract, as well as the optimal time for the supply of the validators, if different from the above.* |

**3.2. TECHNICAL REQUIREMENTS FOR VALIDATORS**:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Requirement / Technical requirement / Parameter value** | **Requirement** | **Requirement value** | **The tenderer has requirements to meet or needs to change** |
|  | Contactless smart card reader | at least or above/more | ISO 14443 A/B (reading/writing) |  |
| 1.2. | Supported Tag-lC | at least or in addition to those specified | MIFARE Classic MIFARE Plus MIFARE Ultralight  MIFARE Ultralight C MIFARE DESFire  MIFARE SmartMX Calypso  SpringCard eIDAS v2 |  |
| 1.3. | EMV and cEMV readers must have an L1 certificate and L2 certificates provided by VISA and MasterCard. | exactly | EMV and cEMV L1 and L2 |  |
| 1.4. | EMV and cEMV (contactless) reader must be L3 | exactly | EMV and cEMV L3 in accordance with the Republic of Latvia Cabinet Regulation  No. 95 “Regulations Regarding Technical Requirements for Electronic Devices and Equipment for the Registration of Taxes and Other Payments” |  |
| 1.5. | Data storage/memory | at least or above/more | 8 GB |  |
| 1.6. | Replaceable external flash memory | at least | 32 GB |  |
| 1.7. | On-board RAM | at least or above/more | 8 GB |  |
| 1.8. | Free access on-board RAM after booting using the pilot application | at least or above/more | 4 GB |  |
| 1.9. | On-board CPU | at least or above/more | Single-core rating  1,550  Multi-core rating  3,887 |  |
| 1.10. | *Ethernet* speed | at least or above/more | 100 Mbps |  |
| 1.11. | *Ethernet* port | exactly | RJ45 Poe port |  |
| 1.12. | Screen size | at least or above/more | 5” |  |
| 1.13. | Screen resolution | at least or above/more | 480x800 pixels |  |
| 1.14. | Screen brightness (nit) | at least or above/more | 450 nit |  |
| 1.15. | Screen type | exactly | Colour |  |
| 1.16. | Touchscreen | exactly | Touchscreen |  |
| 1.17. | Speaker (software volume control) | must be provided |  |  |
| 1.18. | RTC with battery | must be provided |  |  |
| 1.19. | Operating temperature | within the range of at least or above/more | From -20 °C to +50 °C |  |
| 1.20. | Incoming voltage (DC) via PoE | must be provided |  |  |
| 1.21. | Weight | not more than | 2 kg |  |
| 1.22. | Quick response (QR) code reader | must be provided | camera or laser |  |
| 1.23. | Ingress protection (IP) class | not less than | IP54 |  |
| 1.24. | Impact protection (IK) class | not less than | IK8 |  |
| 1.25. | Secure locking of the enclosure with a key | must be provided |  |  |
| 1.26. | Enclosure/validator colour | exactly | to be determined at the moment of signing the contract |  |
| 1.27. | Diameter of bus handle bars | at least or more than | 35 mm – 37 mm |  |
| 1.28. | Warranty (months) | at least or above/more | 36 |  |
| 1.29. | Device identification | must be provided | The device must bear a laser-engraved or metallised sticker with the unique device identification number. |  |
| 1.30. | EC declaration of conformity | at least | Complies with: a) Directive 2014/53/EU of the European Parliament and of the Council;  b) Cabinet Regulation No. 215 “Regulations Regarding Conformity Assessment, Making Available on the Market, Installation and Use of Radio Equipment” <https://likumi.lv/ta/id/351106> |  |
| 1.31. | Compliance with CIPURSE™ Open Standard Specification according to the instructions of OSPT Alliance | must be provided |  |  |
| 1.32. | Compliance with CNA/PayCert Open Standard Specification according to the instructions of STA (alliance) | must be provided |  |  |
| 1.33. | The validator and card interface must be based on an open standard according to ISO/IEC 7816-4 for commands for exchange and ISO/IEC 7816-8 for safety operations | must be provided |  |  |
| 1.34. | Compliance with secure electronic payment standards supported by GooglePay and ApplePay | must be provided |  |  |
| 1.35. | Compliance with the safety standard | at least | a) Republic of Latvia Cabinet Regulation No. 442 “Procedures for Ensuring the Conformity of Information and Communication Technologies Systems to Minimum Security Requirements” – requirements for increased security systems. b) Protection against system application security risks (OWASP Top Ten Web Application Security Risks) for web resources. |  |
| 1.36. | Backup management solution at the system and database level – setting requirements, continuous backup generation, performance control, integrity control, version control, reset function without system interruptions | must be provided |  |  |
| 1.37. | Testing platforms (website) and all testing environments must ensure | must be provided |  |  |
| 1.38 | The Tenderer after request shall provide 3 validators for independent 3rd party Radio and safety tests within 1 month after request. | must be provided |  |  |

**3.3.** Price quote of the participant.

**3.3.1.** Price quote

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| --- | --- | --- | --- | --- | --- |
| **No.** | **Name** | **Unit of measure** | **Amount** | **Price per unit**  **(EUR excluding VAT)** | **Total price**  **(EUR excluding VAT)** |
| 1. | System development and supply | set | 1 |  |  |
| 2. | Validators | pc | 3000 |  |  |
| 3. | Employee training, according to  Clause 1.4 of the TS for at least  10 employees of the contracting authority | set | 1 |  |  |
| 4. | System maintenance costs: |  |  |  |  |
| 4.1. | Fixed monthly fee for 54 months | month | 54 |  |  |
| 4.2. | Fixed monthly fee for 48 months | month | 48 |  |  |
| 4.3. | Fixed monthly fee for 36 months | month | 36 |  |  |
| 4.4. | Fixed monthly fee for 24 months | month | 24 |  |  |
| 5. | Change request works: |  |  |  |  |
| 5.1. | Fee for 1 (one) hour | hour | 1 |  |  |
| 5.2. | Fee for 100 hours | hour | 100 |  |  |
| 5.3. | Fee for 500 hours | hour | 500 |  |  |

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| *Please indicate the costs to still be included in the financial bid and also the maximum number of hours for change requests during the entire term of the contract.* |

**3.4.** The participant shall indicate which of the components of the validator (at least 5 (five), are subject to more frequent replacement and are to be included on the list of spare parts, specifying the cost per unit and the delivery time:

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| --- | --- | --- |
| **Validator system spare parts name** | **Price per unit (EUR excluding VAT)** | **Delivery time for spare parts** |
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Please provide information about any hindrances or obstacles regarding spare parts and this requirement:

**3.5.** Preferred manner of payment:

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**3.6.**Other conditions ensuring the validity of the price of the tender:

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**3.6.** Warranty period:

**3.6.1.** the tenderer shall provide the warranty from the moment of signing the Transfer and Acceptance Deed. The Contractor shall implement the warranty within the time limits set out in the Technical Specification, fully remedying the problems and/or deficiencies, including errors, recorded in the Warranty Application, at its own expense and with its own force.

we can provide an equipment warranty period of at least 36 months;

we can provide a warranty period for software for at least 24 months;

we can provide an additional warranty period of \_\_\_\_\_\_\_ months for equipment and \_\_\_\_\_\_\_ months for software;

*We provide other warranty periods, please specify:*

**3.6.2.** shall provide the warranty in accordance with and following the Contracting Authority’s guidelines with specific categories of applications and their priorities. (Warranty shall cover Category 1, 2, 3 and 4 applications – errors and inaccuracies).

we can provide warranty periods for Category 1, 2, 3 and 4 applications

*We provide other warranty periods, please specify:*

**3.7.** Please specify your proposals for the successful fulfilment of the Contract:

|  |
| --- |
| *Please specify them.* |

**3.8.** The participant may offer to place such radio equipment on the market subject to the following safety classes (https://likumi.lv/ta/id/275671-kartiba-kada-tiek-nodrosinata-informacijas-un-komunikacijas-tehnologiju-sistemu-atbilstiba-minimalajam-drosibas-prasibam):

we can provide radio equipment with basic requirements in terms of security;

we can provide radio equipment with increased requirements in terms of security;

we can provide security category B;

we can provide security category C;

*We provide another security category, please specify:*

**4.** Additional technical information will be provided upon request if required; please send any questions to Sandra Čakša, Procurement Specialist of the Market Research and Procurement Methodology Unit of the Procurement and Contract Management Department, to the e-mail address [sandra.caksa@rigassatiksme.lv](mailto:sandra.caksa@rigassatiksme.lv).

**The information obtained from the market research will be used during the preparation of the procurement procedure regulations for the purposes of discussing technical specification and qualification requirements, improving procurement procedure documentation and promoting competition.**

Annexed:

1. Technical Specification