

ACCEPTED at the SJSC "Electronic Communication Office" Procurement Commission meeting On 30 June 2022 (Minutes No. VASES 2022/12-1)

APPROVED at the SJSC "Electronic Communication Office" Board meeting On 05 July 2022 (Minutes No. 15/2022)

# **Regulations of the OPEN COMPETITION**

# "Purchase of Radio Frequency Direction Finding

Systems"

Riga 2022

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Annex No. 1: Application for Participation in an Open Competition

Annex No. 2: Technical Specification

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## I General Information

- 1. **Procurement Identification Number** VASES 2022/12.
- Name, address, details of the Contracting Authority State Joint-Stock Company "Electronic Communication Office" (hereinafter referred to as – VAS ES); unified reg. No. 40003021907, 5 Eksporta street, Riga, Latvia, LV-1010, telephone - 67333034.
- 3. **Procurement nomenclature (CPV code)** 38400000-9 (physical indicator testing instruments), 51540000-9 (installation services for special purpose devices and equipment).
- 4. **Subject-matter of the procurement** supply and installation of five radio frequency direction finding systems in accordance with the Technical Specification (Annex No. 2), which contains the minimum requirements for the subject-matter of the procurement.
- 5. **Contract performance period**: within a maximum period of 6 (six) months from the date of conclusion of the contract.

#### 6. Place of contract performance:

- 6.1. 171 Slokas street, Riga;
- 6.2. 87 Strādnieku street, Daugavpils;
- 6.3. 4 Kr. Valdemāra street, Rēzekne;
- 6.4. 7 Gaujas street, Valmiera;
- 6.5. 77 Inženieru street, Ventspils.
- 7. Procedure for obtaining the Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems", Id. No. VASES 2022/12 (hereinafter referred to as the Regulations):
  - 7.1. Tenderers may obtain the Regulations electronically via the e-competition subsystem website of the Electronic Procurement System: <u>https://www.eis.gov.lv/EKEIS/Supplier/1</u> from the date of publication of the contract notice on the website of the Procurement Monitoring Bureau until the deadline for submission of proposals;
  - 7.2. The Regulations may be familiarised with in printed format at the premises of the VAS ES in Riga, at 5 Eksporta street, Office 336, contact person: Ms Vineta Grigorjeva, Member of the Procurement Commission (hereinafter referred to as the Procurement Commission) stipulated by the Order No. 35 of 16 June 2022, from the moment of the Procurement announcement, by making a prior appointment by calling 28305574 or by e-mail vineta.grigorjeva@vases.lv on business days 9:00 AM to 12:00 PM, starting from the date of publication of the contract notice on the website of the Procurement Monitoring Bureau until the deadline set for submission of proposals;
  - 7.3. A certified hard copy of the Regulations is available at the premises of the VAS ES in Riga, at 5 Eksporta street, Office 336, contact person: Ms Vineta Grigorjeva, Member of the Procurement Commission, on business days (9:00 AM to 12.00 PM), by making a prior appointment by calling 28305574 or by e-mail: <u>vineta.grigorjeva@vases.lv</u> within 3 (three) business days of receipt of the request, provided that the request is made in good time before the deadline set for submission of the proposal.

#### 8. Meeting of Interested Tenderers:

- 8.1. The Contracting Authority will organise a meeting of Interested Tenderers (hereinafter referred to as "the Meeting") if at least two Tenderers' proposals to organise the Meeting are received not later than 10 days before the date of opening of proposals;
- 8.2. The Purchaser will hold the Meeting not later than 5 (five) calendar days before the opening of proposals and post information about the Meeting on the Purchaser's profile at least 3 (three) calendar days in advance;

<sup>&</sup>lt;sup>1</sup> An interested party registered in the electronic procurement system may register as a recipient of the Regulations; for an explanation, see the website: https://www.eis.gov.lv/EIS/Publications/PublicationView.aspx?PublicationId=883.

- 8.3. The Contracting Authority will provide additional information and answer questions raised during the Meeting;
- 8.4. Minutes of the meeting will be taken, and the Contracting Authority (within 3 business days) will post an extract of the Minutes in the e-competition subsystem of the Electronic Procurement System.

#### 9. Submission of proposals and presentation requirements:

- 9.1. Proposals must be submitted electronically via the e-competition subsystem of the Electronic Procurement System by 16 September 2022 at 11:00, subject to the following options of the Tenderer:
  - 9.1.1. By using the tools offered by the e-competition subsystem, by filling in the forms posted in the e-competition subsystem of that system in the section of this procurement procedure;
  - 9.1.2. By electronically preparing the documents to be filled in outside the e-competition subsystem of the Electronic Procurement System and attaching them in the appropriate interface field of the Electronic Procurement System (in this case, the Tenderer is responsible for compliance of the forms to be filled in with the requirements of the documentation and the model forms);
  - 9.1.3. By encrypting the electronic proposal outside the e-competition subsystem with data protection tools offered by a third party and protecting it with an electronic key and password (in this case, the Tenderer is responsible for compliance of the forms to be filled in with the requirements of the documentation and the model forms, as well as the document opening and reading options).
- 9.2. Proposals submitted outside the e-competition subsystem of the Electronic Procurement System will be considered non-compliant with the requirements of the Regulations, they will not be examined and will be returned unopened to the applicant.
- 9.3. In preparing its tender, the Tenderer shall have regard to the following:
  - 9.3.1. The application form and the financial proposal in accordance with the templates attached to the procurement procedure profile in the e-competition subsystem of the Electronic Procurement System must be completed only electronically, each in a separate electronic document in a format readable using Microsoft Office 2010 (or later software version) tools, and attached to the section of the procurement procedure profile designated for it. The Technical Proposal must be prepared as a stand-alone electronic document in a format readable using Microsoft Office 2010 (or later software versions) or Adobe Acrobat Reader tools providing text search and copy capabilities;
  - 9.3.2. When submitting a proposal, the Tenderer shall sign it with a secure electronic signature and time stamp or with an electronic signature offered by the Electronic Procurement System. The Tenderer may, at its own discretion, sign the application to participate, the Technical Proposal and the Financial Proposal separately by means of a secure electronic signature and a time stamp. The Proposal (parts thereof, if signed separately) shall be signed by a person whose signatory right must be corroborated in accordance with the regulations laid down in the laws and regulations. If the documentation is signed by a person authorised by the Tenderer, a power of attorney issued by the person authorised to sign or a duly certified copy of the authorisation shall be attached thereto.
- 9.4. If the Tenderer has used additional encryption to protect the proposal data (in accordance with Sub-clause 9.1.3 of the Regulations), the Tenderer shall provide the Procurement Commission with an electronic key with a password for opening the encrypted document not later than 15 (fifteen) minutes after the deadline set for the submission of proposals;
- 9.5. The documents included in the proposal must be clearly legible, in Latvian. Words and figures must be without insertions or corrections. If the documents certifying the Tenderer's professional activity or qualifications are in a foreign language, they must be accompanied by a translation into Latvian, certified by the signatory. The Tenderer shall be responsible for the

conformity of the translation of the original documents to the original document and accuracy thereof in accordance with the requirements of the laws and regulations;

- 9.6. The Proposal documents must be drawn up in accordance with the Cabinet of Ministers Regulation No. 558 of 4 September 2018 "Procedures for Drafting and Presentation of Documents";
- 9.7. The Proposal must be prepared in such a way that the operation of the e-competition subsystem of the Electronic Procurement System is not compromised in any way and access to the information contained in the Proposal is not restricted, and the Proposal itself may not contain computer viruses or other harmful software or generators thereof. If the Tender will contain any of the risks mentioned in this Clause, it will not be examined;
- 9.8. By submitting a proposal, the Tenderer accepts in full all the conditions and requirements of the Technical Specification;
- 9.9. Public documents issued abroad (by public authorities, courts, the legislator, etc.) require authentication (legalisation). In order to use a document issued abroad in the Republic of Latvia:
  - 9.9.1. if the document has been issued in a country which is a party to the 1961 Hague Convention Abolishing the Requirement of Legalisation for Public Documents Abroad, its authenticity must be certified by an "Apostille" in accordance with Article 3 of that Convention by a competent authority of that foreign country. A document prepared in such a way does not need to be certified by a diplomatic mission/consular post of the Republic of Latvia;
  - 9.9.2. If the document has been issued in a country which is not a party to the 1961 Hague Convention "Abolishing the Requirement of Legalisation of Foreign Public Documents", it must be legalised at the diplomatic mission/consular post of the Republic of Latvia in that foreign country, or first at the diplomatic mission/consular post of that country in Latvia or the nearest foreign country and then at the Consular Department of the Ministry of Foreign Affairs of the Republic of Latvia;
  - 9.9.3. Legalisation of documents is not required if a public document was issued in a Member State of the European Union, the European Economic Area or the Swiss Confederation. If the Contracting Authority will have any doubts as to the authenticity of the document, the Contracting Authority will contact in writing the foreign authority that issued the public document or is responsible for the authenticity of the public document, unless international treaties approved by the Saeima or European Union legislation provide otherwise.

#### 10. Changes to the Proposal and procedures for withdrawing it

- 10.1. A Tenderer may withdraw its proposal before the deadline set for submission of proposals by notifying the Procurement Commission. The notice shall be submitted electronically to the e-competition subsystem of the Electronic Procurement System;
- 10.2. A Tenderer may amend its proposal before the deadline set for submission of proposal by uploading the amended proposal or part thereof to the e-competition subsystem of the Electronic Procurement System and signing the amendments with a secure electronic signature and time stamp or with an electronic signature provided by the Electronic Procurement System.

#### 11. Opening of proposals:

- 11.1. Proposals shall be opened in the e-competition subsystem of the Electronic Procurement System on the date specified in Clause 9.1 of the Regulations, immediately after the deadline set for submission of proposals. Summary of the financial proposals of the Meeting for Opening of Proposals is available in the e-competition subsystem of the Electronic Procurement System;
- 11.2. The Procurement Commission will evaluate the Proposals in closed meetings;

- 11.3. The Contracting Authority shall postpone or cancel the Meeting for Opening of Proposals and publish information thereon in the e-competition subsystem of the Electronic Procurement System, if an application has been lodged with the Procurement Monitoring Bureau concerning the requirements included in the Regulations or the contract notice, subject to the provisions of Clauses 11.4 and 11.5 of the Regulations;
- 11.4. In the event that the Procurement Monitoring Bureau's Submission Examination Commission decides to uphold the requirements set out in the Regulations or if the administrative case is dismissed, the Contracting Authority shall publish information on the place and time of the Meeting for Opening of Proposals in the e-competition subsystem of the Electronic Procurement System and inform the Tenderers thereof at least 3 (three) business days in advance;
- 11.5. In the event that the Procurement Monitoring Bureau's Submission Examination Commission decides to cancel the requirements set out in the Regulations or decides on measures to remedy the irregularities found, the Contracting Authority shall not open the proposals received and issue or return them to the Tenderers. The Contracting Authority shall publish information on the cancellation of the Meeting for Opening of Proposals in the e-competition subsystem of the Electronic Procurement System.
- 12. No bid bond is provided for.
- 13. No security of performance of the obligations is provided for.

#### 14. Other general information:

- 14.1. Participation in an open competition is an expression of the Tenderer's free will. By submitting its proposal for participation in an open competition, the Tenderer fully accepts and is prepared to comply with all the requirements, rules and provisions set out in the Regulations;
- 14.2. The Tenderer must bear full costs of preparing and submitting the proposal. The VAS ES does not assume any liability for these costs, regardless of the outcome of the open competition;
- 14.3. The Tenderer shall submit a Proposal for the entire subject-matter of the procurement;
- 14.4. The Tenderer may not submit variants of proposals;
- 14.5. The Contracting Authority will publish additional information and possible changes and/or supplements and explanations on changes to the Regulations in the e-competition subsystem of the Electronic Procurement System.
- 15. **Contact persons** contact person authorised to provide organisational information on the open competition Vineta Grigorjeva, telephone: 28305574, e-mail address: <u>vineta.grigorjeva@vases.lv</u>.

#### **II Tenderer Selection Documents**

#### 16. Conditions for Participation of the Tenderer in the Open Competition:

- 16.1. The Tenderer (in the case of an Association of Suppliers or in the case of a partnership all the members of the Association of Suppliers) must be registered as economic operators in accordance with the laws and regulations of their country of residence;
- 16.2. The Tenderer does not meet the exclusion conditions of the Tenderers set out in Section 42, Paragraph One of the Public Procurement Law. This requirement also applies to the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law;
- 16.3. With regard to the economic and financial capabilities, technical and professional capabilities of the Tenderer, the Tenderer may rely on the abilities of other persons where necessary for the performance of the procurement contract, irrespective of the legal nature of the mutual relationship. In such a case, the Tenderer shall demonstrate to the satisfaction of the Procurement Commission that it will have effective access to the resources of those persons which it does not have itself and which are necessary for the performance of the procurement contract, to the extent that they will be

necessary, by providing a declaration or agreement of those persons to place the necessary resources at the Tenderer's disposal. The Tenderer may rely on the capabilities of other persons to demonstrate professional experience or the availability of personnel to meet the requirements of the Contracting Authority only if those persons will provide the services for which the relevant capabilities are required;

- 16.4. If an association of suppliers is declared the winner of the Open Competition, it must register the partnership in accordance with the procedure provided for by law within 10 (ten) business days of receipt of the relevant Contracting Authority's notification;
- 16.5. In order to submit a proposal in a procedure of procurement organised in the e-competition subsystem of the Electronic Procurement System, the Tenderer shall register in the Electronic Procurement System (for registration details, see here https://www.eis.gov.lv/ElS/Publications/PublicationView.aspx?PublicationId=4&systemCod e=CORE) or submit a proposal in the e-competition subsystem by using other information system designed for electronic submission of proposals and capable of interfacing with the e-competition subsystem in accordance with the provisions of the laws and regulations laying down the technical requirements for information systems to be used for electronic submission of applications and proposals.
- 17. Requirements relating to the economic and financial situation of the Tenderer and documents supporting the qualifications:

No.	Specified qualification requirements	Documents to be submitted in support of qualifications
17.1.	The Tenderer is registered under the law of the Republic of Latvia or its country of registration.	The Procurement Commission will verify the fact of registration of the Tenderers registered in the Republic of Latvia in public databases. Tenderers registered abroad must provide proof of registration.

# 18. Requirements concerning the technical and professional capabilities of the Tenderer and supporting documents for the qualifications:

No.	Specified qualification requirements	Documents to be submitted in support of qualifications
18.1.	The Tenderer has a positive track record (delivery under conditions of the contract) in the manufacture/distribution of radio frequency spectrum monitoring receivers and direction finding equipment.	Information on the Tenderer's experience in the manufacture/distribution of radio frequency direction finding systems (according to Annex No. 5)
18.2.	The Tenderer must provide a service authorised by the manufacturer of the proposed radio frequency direction finding systems during the warranty period of the radio frequency direction finding systems	Information on the service authorised by the manufacturer of the radio frequency direction finding systems which is to provide the warranty service for the proposed radio frequency direction finding systems (in accordance with Annex No. 5)
18.3.	The Tenderer's company has developed and implemented a quality management system that complies with certain international, European or national standards (ISO 9001 or equivalent).	A copy of the certificate (declaration issued by the certification body) approved by the Tenderer or other evidence of equivalent quality management measures, attesting the compliance of the Tenderer with the requirements set out in Clause 18.3 of the Regulations regarding the introduced quality system.

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### 19. Documents to be provided by the Tenderer:

- 19.1. Tenderer's application for participation in the open competition (Annex No. 1). The application for participation in an open competition published in the e-competition subsystem of the Electronic Procurement System shall be signed by the person entitled to represent the Tenderer (according to the entries in the commercial register) or by its authorised representative (enclosing the relevant power of attorney or a certified copy of the power of attorney). If the proposal is submitted by an Association of Suppliers or a partnership, the application shall be signed by the person(s) entitled to represent all the members or by their authorised representative(s).
- 19.2. A declaration of the Tenderer (included in the Tenderer's application for participation in the Open Competition, Annex No. 1) that it is not subject to the exclusion conditions set out in Section 42, Paragraph One of the Public Procurement Law;
- 19.3. Evidence of qualifications specified in Clauses 17 and 18 of the Regulations;

The Tenderer is entitled to submit the European Single Procurement Document (hereinafter referred to as – the "ESPD") as initial evidence to demonstrate compliance with the requirements set out in Clauses 17 and 18 of the Regulations (the model forms for the ESPD are set out in the European Commission Implementing Regulation 2016/7 of 5 January 2016 laying down a standard form for the European Single Procurement Document).

Where the Tenderer has chosen to submit an ESPD to certify that it meets the requirements for the selection of Tenderers set out in the Regulations, it shall also submit this document for each person whose capabilities the Tenderer relies on to certify that its qualifications meet the requirements set out in the Regulations, and for any subcontractor it has identified, the value of the services transferred to which is at least 10% of the value of the procurement contract. The Association of Suppliers shall submit a separate ESPD for each of its members.

The Contracting Authority shall be entitled at any stage of the procedure of the open competition to require the Tenderer to submit all the documents (or part thereof) necessary to prove its compliance with the requirements for the selection of Tenderers set out in the Regulations.

The ESPD is available in the Electronic Procurement System <u>http://espd.eis.gov.lv</u>. The Tenderer must also indicate in the ESPD whether it meets the exclusion condition referred to in Section 42, Paragraph One, Clauses 2, 12, 13 and 14 of the Public Procurement Law.

Where the Tenderer to whom the contract is to be awarded in an open competition procedure has submitted a European Single Procurement Document (ESPD) as initial evidence of compliance with the tenderer selection requirements set out in the Regulations, the Procurement Commission shall, before taking a decision on the award of the contract, require the submission of documents attesting the Tenderer's compliance with the tenderer selection requirements set out in the Regulations.

- 19.4. Technical Proposal, prepared in accordance with the provisions of Clause 24 of the Regulations;
- 19.5. Financial Proposal, prepared in accordance with the provisions of Clauses 25–28 of the Regulations.

#### 20. Documents to be submitted in the event of subcontracting:

- 20.1. The Tenderer shall indicate in the tender all the foreseeable subcontractors and subsubcontractors and indicate parts of the contract to be subcontracted and their percentage (%);
- 20.2. In case the Tenderer relies on the capabilities of subcontractors to fulfil the requirements referred to in Clauses 17–18 of the Regulations, the Tenderer shall submit a declaration(s) of the subcontractor(s) indicated in the Proposal confirming their readiness to participate in the open competition and perform the specified scope (Annex No. 6 to the Regulations) and the document referred to in Clause 19.2 of the Regulations, as well as documents confirming

the subcontractor's(s') compliance with the requirements for the performance of which the Tenderer relies on the subcontractor's(s') capabilities.

# 21. Documents to be submitted in the event, if a proposal is submitted by an Association of Suppliers:

- 21.1. The Tenderer shall submit an agreement on the formation of an Association of Suppliers specifying the person who will represent the relevant group in the open competition and the responsibilities of each person;
- 21.2. The Tenderer shall provide the information referred to in Clause 19.2 of the Regulations for each member or participant of the Association of Suppliers.
- 22. If the Tenderer does not comply with the requirements of Clauses 17–18 of the Regulations and/or has not submitted all the documents required by Clauses 19–21 of the Regulations, the Tenderer shall be excluded from further participation in the open competition.

#### **III Technical Specification**

23. The Technical Specification for the open competition is attached as Annex No. 2 to the Regulations.

#### **IV Technical Proposal**

24. The Tenderer shall prepare the Technical Proposal in accordance with the requirements set out in the Technical Specification (Annex No. 2) and in accordance with the Technical Proposal Form (Annex No. 3) published in the e-competition subsystem of the Electronic Procurement System.

#### V Financial Proposal

- 25. The Financial Proposal must be expressed in EUR, indicating the amount excluding value added tax (hereinafter referred to as VAT), VAT and the total amount including VAT.
- 26. The Financial Proposal must be submitted in accordance with the Financial Proposal Form published in the e-competition sub-system of the Electronic Procurement System (Annex No. 5).
- 27. The prices of the Financial Proposal shall include all the costs related to the subject-matter of the procurement, all the taxes and duties, if any, as well as all the costs related to possible risks (for example, fluctuations in market prices during the planned period of performance of the Contract).
- 28. The prices quoted in the Financial Proposal will be valid throughout the period of performance of the procurement contract.

#### VI Evaluation of the Proposal and Decision-Making

- 29. Only proposals submitted in accordance with the procedure and within the time limits set out in the Regulations will be compared and evaluated.
- 30. The evaluation of proposals will be carried out according to the following procedure the Procurement Commission:
  - 30.1. will evaluate conformity of the submitted selection documents to the provisions of requirements referred to in Clauses 19 –21 of the Regulations. Non-compliant proposals will be excluded from further evaluation;
  - 30.2. if the Procurement Commission finds that any information or document provided by the Tenderer in its proposal is unclear or incomplete, it will require the Tenderer or a competent authority to clarify or supplement the information or document or to provide the missing document, ensuring equal treatment of all Tenderers;
  - 30.3. if the Procurement Commission has any doubts as to the authenticity of the copy of the document submitted, it will request the Tenderer to produce the original document;
  - 30.4. will evaluate the Tenderers' compliance with the qualification requirements set out in paragraphs 17 and 18 of the Regulations. Non-compliant proposals will be excluded from further evaluation;

- 30.5. will evaluate the Technical Proposals for compliance with the Technical Specification, and non-compliant proposals will be excluded from further evaluation;
- 30.6. will evaluate the Financial Proposal and check it for arithmetical errors if the Procurement Commission finds arithmetical errors in the Financial Proposal, it shall correct these errors by notifying the corrected errors and the corrected proposal amount to the Tenderer whose errors have been corrected. Correction of arithmetical errors is taken into account in the evaluation of the financial proposal.
- 30.7. if, during the evaluation process, the Procurement Commission considers the proposal of any of the Tenderers to be unreasonably low, the Procurement Commission will act in accordance with Section 53 of the Public Procurement Law.
- 30.8. if, during the evaluation process, the Procurement Commission finds that the Tenderer or proposal does not comply with the requirements of the Regulations at any stage of the evaluation, the Tenderer or proposal will be excluded from participation in the open competition.
- 31. The Procurement Commission will select as a winner the Tenderer which has submitted the most economically advantageous proposal that complies with the requirements of the Regulations and the Technical Specification on the basis of the following criteria:

No.	Criterion	Maximum number of points
1.	Technical proposal	100.00
1.1	Implementation of the requirement of Part 4.1, Clause 4 of the <u>Technical Specification</u> The direction finding system must be "TDOA ready", which means in this context that, in the future, if required, the functionality of the system to perform signal source localization using TDOA technology can be added as an option to an existing system without changing the core elements of the system, such as the radio monitoring receiver/direction finder, antenna switch matrix If the Tenderer will offer a "TDOA Ready" direction finding system, the submitted proposal will be awarded 3 (three) evaluation points.	3.00
1.2	Implementation of the requirement of Part 4.1, Clause 11 of the Technical Specification The direction finding antenna must have an integrated lightning protection (with a lightning rod in the centre of the direction finding antenna). If the Tenderer will propose a direction finding antenna with an integrated lightning protection, the submitted proposal will be awarded 3 (three) evaluation points.	3.00
1.3		
1.4	Implementation of the requirement of Part 4.1, Clause 17 of the Technical Specification DF system should be able to perform spectrum measurements (DF measurement not required) from 30 MHz to 6 GHz.	10.00

No.	Criterion	Maximum number of points
	If the Tenderer will propose a direction finding system capable of performing direction measurements (direction detection measurement is not required) from 30 MHz to 6 GHz, the submitted proposal will be awarded 10 (ten) evaluation points.	·
1.5	Implementation of the requirement of Part 4.1, Clause 18 of the <u>Technical Specification</u> <i>DF</i> antenna for the frequency range at least from 87.5 MHz to 970 <i>MHz</i> should be with dual polarization – switchable between vertical and horizontal. If the Tenderer will propose a direction finding antenna with dual polarisation, switchable between vertical and horizontal, within the frequency range from at least 87.5 MHz to 970 MHz, the submitted proposal will be awarded 3 (three) evaluation points.	3.00
1.6	Implementation of the requirement of Part 4.1, Clause 20 of the Technical Specification Warranted DF bearing accuracy of the DF system in frequency range from 30 MHz to 3 GHz should be equal or better than 1° RMS when tested on open-air test facility in reflection-free environment, as per Report ITU-R SM.2125. If the Tenderer will propose a direction finding system with a warranted direction detection accuracy within the frequency range from 30 MHz to 3 GHz equal to or better than 1° RMS when tested according to ITU- R SM.2125 report in an open, non-reflecting environment, the proposal submitted will be awarded 2 (two) evaluation points.	2.00
1.7	Implementation of the requirement of Part 4.1, Clause 22 of the Technical Specification DF Sensitivity of the equipment in frequency range from 30 MHz to 3 GHz referred to 1 kHz DF bandwidth, 1s integration time and 3° accuracy parameters as per recommendation ITU-R SM.2096-0 should be equal or better than 20 dB $\mu$ V/m (10 $\mu$ V/m). If the Tenderer will propose a direction finding system with a sensitivity within the frequency range from 30 MHz to 3 GHz, referenced to 1 kHz direction finding bandwidth, 1 s integration time and 3° directional accuracy according to ITU-R Recommendation SM.2096-0, equal to or better than 20 dB $\mu$ V/m (10 $\mu$ V/m), the proposal submitted will be awarded two (2) evaluation points.	2.00
1.8	Implementation of the requirement of Part 4.1, Clause 25 of the Technical Specification Frequency tuning error should not be higher than $\pm$ 0.1 ppm. If the Tenderer will propose a direction finding system with a frequency tuning accuracy error not higer than $\pm$ 0.1 ppm, the proposal submitted will be awarded two (2) evaluation points.	2.00
1.9	Implementation of the requirement of Part 4.1, Clause 28 of the Technical SpecificationMaximal input signal level warranted value should be at least +10 dBm.If the Tenderer will propose a direction finding system with warranted maximal input signal level at least +10 dBm, the proposal submitted will be awarded 1 (one) evaluation point.	1.00
1.10	Implementation of the requirement of Part 4.1, Clause 30 of the Technical Specification	1.00

No.	Criterion	Maximum number of points	
	IF rejection warranted value should be equal or higher than 80 dB.		
	If the Tenderer will propose a direction finding system with a warranted		
	value of the IF rejection equal to or greater than 80 dB, the proposal		
	submitted will be awarded one (1) evaluation point.		
1.11	Implementation of the requirement of Part 4.1, Clause 32 of the		
	Technical Specification		
	Image rejection warranted value should be equal or higher than 80		
	dB.	1.00	
	If the Tenderer will propose a direction finding system with a warranted		
	value of the Image rejection equal to or greater than 80 dB, the		
	proposal submitted will be awarded one (1) evaluation point.		
1.12	Implementation of the requirement of Part 4.1, Clause 36 of the		
	Technical Specification		
	Direction finding bandwidth selection should include at least 5 kHz,		
	12 kHz, 30 kHz, 120 kHz, 300 kHz, 1 MHz, 5 MHz, 10 MHz, 20 MHz,	F 00	
	50 MHz (+/-30%).	5.00	
	If the Tenderer will propose a direction finding system with a direction		
	detection bandwidth selection of at least 5 kHz, 12 kHz, 30 kHz, 120 kHz, 300 kHz, 1 MHz, 5 MHz, 10 MHz, 20 MHz, 50 MHz (+/-30%), the		
	proposal submitted will be awarded 5 (five) evaluation points.		
1.13	Implementation of the requirement of Part 4.1, Clause 38 of the		
1.13	Technical Specification		
	DF system should be able to produce live spectrum of signal being DF-		
	ed with an instantaneous bandwidth of at least 50 MHz.		
	If the Tenderer will propose a direction finding system capable of	5.00	
	producing live spectrum of signal being DF-ed with an instantaneous		
	bandwidth of at least 50 MHz, the proposal submitted will be awarded		
	5 (five) evaluation points.		
1.14	Implementation of the requirement of Part 4.1, Clause 39 of the		
	Technical Specification		
	DF system should be able to produce live spectrum of signal being DF-		
	ed with resolution at least 10 times finer than DF bandwidth.	0.00	
	If the Tenderer will propose a direction finding system capable of	2.00	
	producing live spectrum of signal being DF-ed with resolution at least		
	10 times finer than DF bandwidth, the proposal submitted will be		
	awarded 2 (two) evaluation points.		
1.15	Implementation of the requirement of Part 4.1, Clause 41 of the		
	Technical Specification		
	DF system should be able to produce live spectrum of signal being DF-		
	ed consisting at least of 1000 points.	2.00	
	If the Tenderer will propose a direction finding system capable of	2.00	
	producing live spectrum of signal being DF-ed consisting at least of		
	1000 points, the proposal submitted will be awarded 2 (two)		
1 1 0	evaluation points.		
1.16	Implementation of the requirement of Part 4.1, Clause 43 of the		
	<u>Technical Specification</u>		
	DF system should be able to produce live spectrum of signal being DF-	2.00	
	ed at least 5 times per second.		
	If the Tenderer will propose a direction finding system capable of		
	displaying the spectrum of the signal to be found in real time at least		

No.	Criterion	Maximum number of points
	5 times per second, the proposal submitted will be awarded 2 (two) evaluation points.	
1.17	Implementation of the requirement of Part 4.1, Clause 49 of the Technical Specification Receiver should have remotely switchable hardware-based attenuator in the range at least from 0 dB to 40 dB in 5 dB steps. If the Tenderer will propose a direction finding system with a receiver with remotely switchable hardware-based attenuator within the range at least from 0 dB to 40 dB in 5 dB steps, the proposal submitted will be awarded 3 (three) evaluation points.	3.00
1.18	Implementation of the requirement of Part 4.1, Clause 50 of the Technical Specification DF system should be capable to perform bandwidth measurements using $\beta\%$ method (according to recommendation ITU-R SM.443). If the Tenderer will propose a direction finding system capable of bandwidth measurements using the $\beta\%$ method (according to Recommendation ITU-R SM.443), the proposal submitted will be awarded 2 (two) evaluation points.	2.00
1.19	Implementation of the requirement of Part 4.1, Clause 51 of the Technical SpecificationDF system should be capable to perform measurements of signal field strength and signal frequency offset from set frequency.If the Tenderer will propose a direction finding system capable of measuring the signal field strength and the frequency offset of the signal from the set frequency, the proposal submitted will be awarded 2 (two) evaluation points.	2.00
1.20	Implementation of the requirement of Part 4.2, Clause 53 of the Technical Specification The DF system's programming interface should be independent of any software (executables, dynamic-link libraries) outside DF equipment. An example of such interface is SCPI commands sent to TCP port of equipment. If the Tenderer will propose a direction finding system whose programming interface will be independent of the any software (executable files, dynamic link libraries) outside the direction finding system equipment, the proposal submitted will be awarded 10 (ten) evaluation points.	10.00
1.21	Implementation of the requirement of Part 4.2, Clause 54 of the Technical Specification The DF system's programming interface should be SCPI commands or C# API. If the Tenderer will propose a direction finding system with a programming interface with SCPI commands or C# API, the proposal submitted will be awarded 3 (three) evaluation points.	3.00
1.22	Implementation of the requirement of Part 4.2, Clause 62 of the Technical Specification Programming interface should provide possibility to request measurement, set DF frequency, perform direction finding and spectrum acquisition and receive result in no more than 200 ms in total.	2.00

No.	Criterion	Maximum number of points
	If the Tenderer will propose a direction finding system whose programming interface will provide a capability to request a measurement, set the direction finding frequency, perform direction detection and spectrum acquisition and obtain the results without spending more than 200 ms for all operations combined, the proposal submitted will be awarded 2 (two) evaluation points.	
1.23	Implementation of the requirement of Part 4.2, Clause 63 of the <u>Technical Specification</u> <i>Programming interface should provide functionality to digitally obtain</i> <i>demodulated audio of the signal that is being DF-ed.</i> If the Tenderer will propose a direction finding system whose programming interface will provide the functionality to obtain digitally demodulated audio of the signal that is being DF-ed, the proposal submitted will be awarded three (3) evaluation points.	3.00
1.24	Implementation of the requirement of Part 4.2, Clause 64 of the Technical Specification Programming interface should provide functionality to digitally obtain demodulated audio when direction finding is inactive. If the Tenderer will propose a direction finding system whose programming interface will provide the functionality to digitally obtain demodulated audio of the signal when direction finding is inactive, the proposal submitted will be awarded 2 (two) evaluation points.	2.00
1.25	Implementation of the requirement of Part 4.2, Clause 65 of the Technical Specification Programming interface should provide functionality to obtain spectrum when direction finding is inactive e.g. when equipment used as monitoring receiver. If the Tenderer will propose a direction finding system whose programming interface will provide the functionality to obtain a spectrum when direction finding is inactive, the proposal submitted will be awarded 2 (two) evaluation points.	2.00
1.26	Implementation of the requirement of Part 4.2, Clause 66 of the Technical Specification Programming interface should provide functionality to obtain signal field strength and signal frequency offset from set frequency. If the Tenderer will propose a direction finding system whose programming interface will provide the functionality to obtain the signal field intensity and the signal frequency offset from the set frequency, the proposal submitted will be awarded 2 (two) evaluation points.	2.00
1.27	Implementation of the requirement of Part 4.2, Clause 67 of the Technical Specification Programming interface should provide functionality to obtain signal field strength and occupied bandwidth using $\beta$ % method (according to ITU-R SM.443). If the Tenderer will propose a direction finding system whose programming interface will provide the functionality to obtain signal field strength and occupied bandwidth using the $\beta$ % method (according to ITU-R SM.443), the proposal submitted will be awarded 2 (two) evaluation points.	2.00

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No.	Criterion	Maximum number of points
1.28	Implementation of the requirement of Part 4.2, Clause 68 of the <u>Technical Specification</u> <i>Programming interface should provide functionality to obtain digital IQ</i> <i>data.</i> If the Tenderer will propose a direction finding system whose programming interface will provide the functionality for digital IQ data acquisition, the proposal submitted will be awarded 5 (five) evaluation points.	5.00
1.29	Implementation of the requirement of Part 4.4, Clause 95 of the Technical Specification Product support (hardware and software of DF systems) must be provided for a period of ten (10) years from the date of handing over the DF systems to the customer. Support must entail supply of spares for and repair of non-obsolete products. Manufacturer must provide the repair service to the obsolete items where economically viable. For obsolete products that are Beyond Economic Repair (BER), the Tenderer must assist the customer in finding and integrating a solution at the cost of customer. If the Tenderer will provide product support (hardware and software of the direction finding systems) for a period of ten (10) years from the date of delivery of the direction finding systems to the customer (as required by Part 4.4, Clause 95 of the Technical Specification), the proposal submitted will be awarded 3 (three) evaluation points.	3.00
2	Financial Proposal         Costs (EUR excluding VAT) for the supply of radio frequency direction         finding systems:         (Points scored = lowest offered costs divided by offered costs         multiplied by 100 points).         Maximum possible score - 100.	100.00
	TOTAL:	200

- 32. The Procurement Commission will recognise as the most economically advantageous proposal the one which has obtained the highest score in accordance with the proposal evaluation criteria set out in Clause 31. If the evaluation of the most economically advantageous proposal results in two or more Tenderers obtaining the same highest score, the Tenderer having obtained the highest score in criterion No. 2 "Financial Proposal" will be declared the winner.
- 33. Before making decision on awarding of the contract, the Procurement Commission will verify whether the Tenderers (including the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law) to whom the contract should be awarded are not subject to the exclusion conditions of Tenderers referred to in Section 42, Paragraph One of the Public Procurement Law:
  - 33.1. By using the information system established by the Cabinet of Ministers, in accordance with the procedure established by the Cabinet of Ministers, the Commission will obtain information from the Information Centre (Punishment Register) of the Ministry of the Interior whether the Tenderer(s) (including the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law) are subject to the infringements and criminal offences referred to in Section 42, Paragraph One, Clauses 1, 6 and 7 of the Public Procurement Law for which the person in question has been sentenced or has been subject to a coercive measure in Latvia. The Contracting Authority shall be entitled to obtain the aforementioned information from the Information Centre (Punishment Register) of the Ministry of the Interior

without requesting the consent of the Tenderer(s) and other persons referred to in Section 42, Paragraph One of the Public Procurement Law;

- 33.2. By using the information system established by the Cabinet of Ministers, in accordance with the procedure established by the Cabinet of Ministers, the Commission will obtain information from the Register of Enterprises on the person referred to in Section 42, Paragraph One, Clause 1 of the Public Procurement Law (a person who is a member of the Board or Council of the Tenderer, a person entitled to represent, a procurator, or a person who is authorised to represent the Candidate or the Tenderer in activities related to a branch);
- 33.3. By using the information system established by the Cabinet of Ministers, in accordance with the procedure established by the Cabinet of Ministers, the Commission will obtain information from the Register of Enterprises on whether the Tenderer(s) (including the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law) are subject to the facts referred to in Section 42, Paragraph One, Clause 3 of the Public Procurement Law;
- 33.4. By using the information system established by the Cabinet of Ministers, in accordance with the procedure established by the Cabinet of Ministers, the Commission will obtain information from the State Revenue Service and local governments of Latvia whether the Tenderer(s) (including the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law) are subject to the fact referred to in Section 42, Paragraph One, Clause 2 of the Public Procurement Law (on the last day of the term set for submission of proposals or on the day when decision on possible awarding of the contract is made, the Tenderer has tax debts in Latvia, including debts of the mandatory state social insurance contributions exceeding in total EUR 150.00 (one hundred and fifty euro, 00 cents). The Contracting Authority shall be entitled to obtain the aforementioned information from the State Revenue Service public database of tax debtors and the Property Tax Administration System without requesting the consent of the Tenderer(s) and other persons referred to in Section 42, Paragraph One of the Public Procurement Law;
- 34. In the event tax debts, including debts of mandatory state social insurance contributions, exceeding in total EUR 150.00 (one hundred and fifty *euro*, 00 cents) are established for a person(s) <u>registered in Latvia</u>, the Procurement Commission will act in accordance with the provisions of Section 42, Paragraph Five of the Public Procurement Law;
- 35. For the purposes of verifying whether a member of the board or council, a person entitled to represent or a procurator, or a person authorised to represent the Tenderer in activities related to a branch, and who is registered or permanently resides in a foreign country, or a Tenderer registered or permanently residing in a foreign country, or a person referred to in Section 42. Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law who is registered or permanently resides in a foreign country, are not subject to the exclusion conditions stipulated in Section 42 of the Law on Public Procurement, the Procurement Commission shall request the Tenderer to submit a statement issued by the relevant competent authority confirming that the member of the board or council of the Tenderer registered in Latvia, the person entitled to represent or the procurator, or the person authorised to represent the candidate or the Tenderer in activities related to the branch, and who is registered or permanently resides in a foreign country, or the Tenderer, or the person referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law are not subjects to the events referred to in Section 42, Paragraph One of the Public Procurement Law. If a person who is subject to the exclusion conditions set out in Section 42, Paragraph One of the Public Procurement Law cannot be a member of the board or council, a person entitled to represent or a procurator, or a person authorised to represent the Tenderer in activities related to a branch, in accordance with the laws and regulations of the country of registration of the Tenderer or the person referred to in Section 42. Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law, the Tenderer shall be entitled to submit a relevant explanation instead of a statement. The Procurement Commission shall set a time limit for the submission of the explanation or statement not shorter than 10 (ten) business days from the date of issue or sending of the request. If the Tenderer

concerned fails to submit the said explanation or statement within the previously set time limit, the Procurement Commission shall exclude the Tenderer from participation in the open competition. If the Procurement Commission is not satisfied from the explanation that the persons concerned are not subject to the exclusion conditions set out in Section 42, Paragraph One of the Public Procurement Law, it shall be entitled to request submission of statements regarding the persons concerned, issued by the competent authorities.

- 36. If documents by which a Tenderer registered or permanently residing in a foreign country can confirm its not being the subject to the events set out in Section 42, Paragraph One of the Public Procurement Law are not issued or are insufficient to confirm that the Tenderer is not subject to the events set out in Section 42, Paragraph One of the Public Procurement Law, such documents may be replaced by an oath or, if the oath is not provided for by the laws and regulations of the country concerned, by a declaration of the Tenderer or of another person referred to in Section 42, Paragraph One of the Public Procurement Law before a competent executive or judicial authority, a sworn notary or a competent organisation in the sector in the country of their registration (permanent residence).
- 37. The Procurement Commission will request the Tenderer to replace a subcontractor the value of the supplies/services to be provided by which is at least 10% (ten per cent) of the total value of the procurement contract, if it complies with the case of exclusion referred to in Section 42, Paragraph One, Clauses 2, 3, 4, 5, 6, or 7 of the Public Procurement Law, and the person whose capabilities the Tenderer relies on to prove that its qualifications meet the requirements set out in the Regulations, if it meets the case of exclusion referred to in Section 42, Paragraph One, Clauses 1, 2, 3, 4, 5, 6, or 7 of the Public Procurement Law. If the Tenderer fails to submit documents on a new subcontractor or a person whose capabilities the Tenderer relies on to prove that its qualifications within 10 (ten) business days after the date of issue or sending of the request, the Procurement Commission will exclude the Tenderer from participation in the open competition.
- 38. If the Tenderer (including the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law) is (are) found to be subject to any of the exclusion conditions set out in Section 42, Paragraph One of the Public Procurement Law, the Procurement Commission shall exclude the Tenderer from participation in the open competition and select the next Tenderer which has received the next highest score and is not subject to the exclusion conditions set out in Section 42, Paragraph One of the Public Procurement Law.
- 39. If, after making the decision on the results of the open competition, the Contracting Authority finds that the Tenderer or the person(s) referred to in Section 42, Paragraph One, Clauses 9, 10 and 11 of the Public Procurement Law are subject to any of the exclusion conditions set out in Section 42, Paragraph One of the Public Procurement Law, the Contracting Authority shall not be entitled to conclude a procurement contract with the Tenderer concerned and shall either make a new decision on the results of the open competition by selecting the next Tenderer with the next highest score or suspend the open competition in accordance with the procedure set out in Clause 42 of the Regulations.
- 40. The Procurement Commission shall select the Tenderers and evaluate their proposals in accordance with the requirements set out in the Public Procurement Law and the Regulations. The decision of the Procurement Commission shall be binding on the Contracting Authority in the event of the conclusion of a procurement contract.
- 41. If only one Tenderer meets all the requirements for the Tenderer selection requirements set out in the Regulations or the contract notice, the Procurement Commission shall prepare and include in the report of the open competition a justification that the requirements set for the selection of Tenderers are objective and proportionate. If the Procurement Commission is not able to justify that the requirements set for the selection of Tenderers are objective and proportionate. If the Procurement commission is not able to justify that the requirements set for the selection of Tenderers are objective and proportionate, it shall decide to suspend the open competition.
- 42. The Contracting Authority may terminate the open competition at any time for objective reasons. The Procurement Commission shall send the information referred to in Clause 43 of the

Regulations to all the Tenderers and submit for publication a notice of the results of the open competition stating the circumstances which led to the suspension of the open competition.

- 43. If an open competition has been terminated or suspended, the Procurement Commission shall, within 3 (three) business days, publish the decision in the e-competition subsystem of the Electronic Procurement System and at the same time inform all the Tenderers about all the reasons for termination or suspension of the open competition, and inform about the time limit, within which the Tenderer may submit an application to the Procurement Monitoring Bureau regarding violations of the procurement procedure-open competition, in compliance with the time limit set out in Section 68, Paragraph Two, Clauses 1 or 2 of the Public Procurement Law.
- 44. The Contracting Authority shall publish the information on the decision made on the award of the contract in the e-competition subsystem of the Electronic Procurement System and send it to all the Tenderers by electronic mail using a secure electronic signature or attaching a scanned document to the electronic mail, within 3 (three) business days after the decision has been made.
- 45. The Contracting Authority shall draw up a report of the open competition and publish it on the purchaser's profile within 5 (five) business days after the decision on the results of the open competition has been made.

#### **VII Contracting**

- 46. The Contracting Authority will conclude the procurement contracts with the winner of the open competition on the basis of the Tenderer's proposal in accordance with the provisions of the Regulations and the draft procurement contract (Annex No. 7).
- 47. Procurement contracts shall be concluded not earlier than on the next business day following the expiry of the waiting period laid down in Section 60, Paragraphs Seven and Eight of the Public Procurement Law, i.e., not earlier than 10 (ten) calendar days after the date on which the information on the decision made has been sent to all the Tenderers by electronic mail using a secure electronic signature or by attaching a scanned document to the electronic mail, and after expiry of the additional one business day period (if the last day of the waiting period is a business day preceded by a weekend day or public holiday, the waiting period shall be extended by one business day).
- 48. The Procurement Contract shall be signed by the Tenderer and submitted to the Contracting Authority not later than within 3 (three) business days after the Tenderer has received a copy of the contract signed by the Contracting Authority.
- 49. If the selected Tenderer refuses to conclude a procurement contract with the Contracting Authority, the Procurement Commission will decide to award the procurement contract to the Tenderer with the next highest score or to suspend the open competition without selecting any of the proposals. If it is decided to award the procurement contract to the Tenderer whose proposal has received the next highest score, but it refuses to conclude a procurement contract, the Procurement Commission will decide to suspend the open competition without selecting any of the proposals.
- 50. Before deciding on whether to conclude a procurement contract with the Tenderer with the next highest score, the Procurement Commission will assess whether it is not to be considered a single market participant jointly with the initially selected Tenderer, which refused to conclude a procurement contract with the Contracting Authority. If necessary, the Procurement Commission will request the next Tenderer to provide a declaration and, where appropriate, evidence that it is not to be considered a single market participant jointly with the initially selected Tenderer. If the next Tenderer will be considered a single market participant jointly with the initially selected Tenderer. If the next Tenderer will be considered a single market participant jointly with the initially selected Tenderer. If without selecting any of the proposals.
- 51. Only amendments to the procurement contract provided for in Section 61 of the Public Procurement Law are permitted during the contracting process.

#### VIII Rights and obligations of the Procurement Commission

- 52. The Procurement Commission operates on the basis of the Public Procurement Law and the Regulations.
- 53. Members of the Procurement Commission are liable for violations of the Public Procurement Law and other laws and regulations, and for disregard of the public interests.
- 54. Rights and obligations of the Procurement Commission:
  - 54.1. To ensure the process and documentation of the open competition;
  - 54.2. To act in accordance with the procedures set out in the Regulations and the applicable laws and regulations;
  - 54.3. To provide written answers to the Tenderers' queries on the Regulations within five business days, but not later than 6 (six) business days before the deadline set for the submission of proposals, if query is received in Latvian and not later than 8 (eight) business days before the deadline set for the submission of proposals;
  - 54.4. To post additional information on open competition in the e-competition subsystem of the Electronic Procurement System;
  - 54.5. To organise a meeting of interested Tenderers not later than 5 (five) calendar days before the opening of proposals, provided that at least two interested Tenderers have proposed holding a meeting of interested Tenderers not later than 10 (ten) calendar days before the date of the opening of tenders. The Contracting Authority shall publish the notice of the meeting of interested Tenderers in the e-competition subsystem of the Electronic Procurement System at least 3 (three) calendar days in advance;
  - 54.6. To decide on the exclusion of the Tenderer from further participation in the open competition, if any of the exclusion conditions of Tenderers set out in Section 42 of the Public Procurement Law applies;
  - 54.7. To decide ton the exclusion of the Tenderer from further participation in the open competition, if it is established that the Tenderer is subject to the sanctions under the Law on International Sanctions and National Sanctions of the Republic of Latvia or any other sanctions provided for in the laws and regulations/guidelines/recommendations;
  - 54.8. To request the Tenderer to explain or supplement the information contained in its proposal, as well as to provide updated information on the proposal, if this is necessary for the examination of the proposal and the selection of Tenderers. The Contracting Authority shall be entitled to verify the necessary information with the competent authority, public databases or other public sources of information. If the Tenderer fails to provide the information requested by the Contracting Authority, the Contracting Authority shall not be obliged to request the Tenderer repeatedly to clarify or supplement the information contained in the proposal;
  - 54.9. To request the Tenderer to explain the information contained in the Technical and/or Financial Proposal and to demonstrate the proposed equipment, provided that such demonstration does not entail disproportionate costs;
  - 54.10. To involve specialists or experts in the work of the Procurement Commission with advisor's rights;
  - 54.11. In the event that, at any stage of the evaluation, it is found that the Tenderer has provided false information for the evaluation of its qualifications or has not provided the information required by the Regulations at all, the Procurement Commission shall be entitled to exclude the Tenderer's proposal from further evaluation;
  - 54.12. To request the Tenderer during the evaluation of proposals to provide declaration that the proposal has been prepared independently;
  - 54.13. To amend the Regulations in accordance with the procedure for amendments laid down in the laws and regulations;
  - 54.14. To correct any arithmetical errors in the Tenderers' financial proposals by informing the Tenderer;

- 54.15. To decide on the results of the open competition;
- 54.16. To select the next Tenderer whose proposal has received the next highest score or suspend the open competition without selecting any of the proposals, if the winner of the open competition refuses to conclude a procurement contract with the Contracting Authority, subject to Clauses 49 to 50 of the Regulations.

#### IX Rights and Obligations of Tenderers

- 55. Tenderer's rights and obligations:
  - 55.1. To follow the additional information provided by the Procurement Commission and published in the Contracting Authority's purchaser's profile in the e-competition subsystem of the Electronic Procurement System;
  - 55.2. To withdraw or modify their proposals before the deadline set for the submission of proposals;
  - 55.3. To request written explanations from the Contracting Authority on the Regulations, ensuring that they are received by the Procurement Commission not later than 8 (eight) business days before the deadline set for the submission of proposals;
  - 55.4. To submit an application to the Procurement Monitoring Bureau regarding the Regulations and the activities of the Contracting Authority with regard to the legality of the Procurement, in accordance with the procedures and within the time limits established by the Public Procurement Law;
  - 55.5. Not later than 10 (ten) calendar days before the date of the opening of proposals, to propose to the Contracting Authority holding of a meeting of the Interested Tenderers;
  - 55.6. To prepare the proposal in accordance with the requirements of the Regulations;
  - 55.7. To provide truthful information about its qualifications and proposal;
  - 55.8. To respond to requests of the Procurement Commission for additional information necessary for the selection of Tenderers, checking the compliance of proposals, comparison and evaluation thereof;
  - 55.9. To cover all the costs related to the preparation and submission of proposals.
- 56. By submitting its proposal, the Tenderer declares that it accepts the terms and conditions contained in the Regulations.

#### X Replacement of a subcontractor involved in the performance of the procurement contract

- 57. The Tenderer shall not be entitled to change the subcontractors involved in the performance of the procurement contract or to engage additional subcontractors without harmonisation with the Contracting Authority.
- 58. The Contracting Authority will not accept the substitution of the subcontractor indicated in the proposal, if any of the following conditions apply:
  - 58.1. the subcontractor whose capabilities the Tenderer has relied on to prove compliance of its qualifications with the requirements set out in the Regulations, and the proposed subcontractor does not have at least the same qualifications as those referred to by the Tenderer when attesting its compliance the requirements set out in the Regulations, or where it is subject to the cases of exclusion of the Tenderers referred to in Section 42, Paragraph One of the Public Procurement Law will be replaced;
  - 58.2. the proposed subcontractor the value of the supplies/services to be provided by which is at least 10% (ten per cent) of the total value of the procurement contract is subject to the cases of exclusion of Tenderers referred to in Section 42, Paragraph One of the Public Procurement Law;
  - 58.3. replacement of the subcontractor would result in such amendments to the Tenderer's proposal which, if originally included, would have affected selection of the proposal in accordance with the proposal evaluation criteria set out in the Regulations.

- 59. The Contracting Authority will not accept the involvement of a new subcontractor where such changes, if made to the original proposal, would have affected selection of the proposal in accordance with the proposal evaluation criteria set out in the Regulations.
- 60. In verifying the eligibility of the new subcontractor, the Contracting Authority shall apply provisions of Section 42 of the Public Procurement Law. The time limits referred to in Section 42, Paragraph Three of the Public Procurement Law shall be counted from the date of submission of the request for replacement of the subcontractor to the Contracting Authority.
- 61. The Contracting Authority shall make a decision to authorise or refuse replacement of the subcontractor(s) involved in performance of the procurement contract or engagement of a new subcontractor(s) not later than within 5 (five) business days after receipt of all the information and documents necessary for making the decision.

# APPLICATION FOR PARTICIPATION IN AN OPEN COMPETITION

"Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12

Table 1 – Tenderer's details <sup>2</sup>	
Name of the Tenderer:	
Registration number:	
Legal address:	
Office address:	
Tel. number:	
E-mail:	
Contact person:	
Phone number, e-mail address:	
Bank name:	
Bank code:	
Account number:	
The company is	□ a small enterprise <sup>3</sup>
	a medium-sized enterprise <sup>4</sup>

By submitting this application:

- I certify my participation in the open competition "Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12 (hereinafter referred to as - the Competition), organised by the SJSC "Electronic Communication Office", by submitting a proposal for the Competition:
- I certify accuracy of all derivations and translations of the documents submitted:
- I certify that (name of the Tenderer) or a member of the partnership, if the Tenderer is a member of the partnership, does not comply with the exclusion conditions referred to in Section 42, Paragraph One, Clauses 1, 2, 3, 4, 6 or 7 of the Public Procurement Law (if complies, it is indicated in the application or in the European Single Procurement Document, if the Tenderer has chosen to submit one);
- \_\_\_\_\_ (name of the Tenderer), member of its board and/or I certify that council, true beneficial owner, person entitled to represent and/or procurator are not subject to international or national sanctions or to sanctions imposed by a Member State of the European Union or North Atlantic Treaty Organisation that affect significant financial and capital market interests and that it does not conform to the provisions of Article (5)(k)(1) of the Regulation (EU) No. 833/2014 of the European Parliament and of the Council of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine and undertake to inform the Contracting Authority immediately of any changes to the given declaration:
- I certify that the personal data included in the proposal have been collected and processed in accordance with the requirements for such data processing set out in the laws and regulations in compliance with the requirements of the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard

Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems" ID No. VASES 2022/12

<sup>&</sup>lt;sup>2</sup> If the proposal is submitted by an association of persons, this table shall be copied according to the number of members of the association of persons, and shall be accompanied by the contract/agreement on establishment of the association of persons, indicating the authorised registrar of the association of persons, entitled to represent the association of persons in this open competition.

<sup>&</sup>lt;sup>3</sup> A small enterprise employing fewer than 50 persons and with an annual turnover and/or annual balance sheet in total not exceeding 10 million euro;

<sup>&</sup>lt;sup>4</sup> A medium-sized enterprise, other than a small enterprise, employing fewer than 250 persons and with an annual turnover not exceeding 50 million euro and/or an annual balance sheet in total not exceeding 43 million euro.

to the processing of personal data and on the free movement of such data;

- I undertake to supply five radio frequency direction finding systems in accordance with the requirements set out in the Technical Specification (Annex No. 2) of the Regulations of the Competition;
- I undertake to comply with the requirements set out in the Regulations of the Competition, as well as the applicable provisions of the laws and regulations governing the procurement process in the Republic of Latvia;
- I recognise validity of my application and proposal until the decision of the Procurement Commission, but in case, if I am awarded the contract – throughout the entire duration of the contract;
- I undertake (if the Contracting Authority selects this proposal) to enter into the contract and to comply with all the essential conditions of that contract;
- I acknowledge that terms of the proposal do not impair requirements included in the Regulations of the Competition and neither impose additional restrictions, and that all the information given in the proposal is true.

The Tenderer shall rely on the technical and professional capabilities of the following persons for the performance of the procurement contract:

#### Table 2 – persons whose technical and professional capabilities the Tenderer relies on:

Person's name	Person's registration No.	Technical and professional capabilities

The Tenderer shall involve the following subcontractors for the performance of the procurement contract:

#### Table 3 – subcontractors:

Subcontractor's name	Subcontractor's registration No.	Share of works to be subcontracted, per cent

#### Declaration on an independently prepared proposal

The Tenderer hereby declares the following with regard to the Competition by providing full and truthful information:

- 1. The Tenderer has read and accepts the contents of this declaration.
- 2. The Tenderer is aware of its obligation to provide full, complete and truthful information in this declaration.
- 3. The Tenderer has authorised each person whose signature appears on the proposal of the Procurement to sign this declaration on behalf of the Tenderer.
- 4. The Tenderer informs that (tick one of the following as necessary):
  - 4.1. It has submitted the proposal independently of competitors<sup>5</sup> and without any consultations, contracts or agreements, or other form of communication with competitors;
  - 4.2. It has had consultations, contracts, agreements or other communications with one or more competitors in connection with the Procurement and, to this end, the Tenderer discloses in the annex to this declaration full and truthful information about them, including names of the competitors and the purpose, nature and content of such communications

<sup>&</sup>lt;sup>5</sup> Within the context of this declaration, the term "competitor" shall mean any natural person or legal entity other than the Tenderer which: submits a proposal for the Competition and/or, having regard to its qualifications, capabilities or experience and the goods or services offered, could submit a proposal for the Competition.

- 5. Except for the case of such communication notified by the Tenderer in accordance with Subclause 4.2 of this declaration, the Tenderer has not had any communications with any competitor in relation to:
  - 5.1. prices;
  - 5.2. methods, factors (circumstances) or formulas for calculating the price;
  - 5.3. the intention or decision to participate or not to participate in the procurement (to submit or not to submit a proposal); or
  - 5.4. submission of such a tender that does not comply with the requirements of the procurement;
  - 5.5. quality, scope, specification, performance, delivery or other conditions to be dealt with independently of competitors for the products or services covered by this procurement.
- 6. The Tenderer has not knowingly, directly or indirectly disclosed and will not disclose the terms of the proposal to any competitor before the official date and time of the opening of proposals or the award of the contract, or it has been specifically disclosed in accordance with Clause 4.2 of this declaration.
- 7. The Tenderer is aware that the Competition Law provides for liability for prohibited agreements with a fine of up to 10% of the offender's net turnover of the last financial year, and the Public Procurement Law provides for exclusion of the Tenderer from participation in the procurement procedure for a period of 12 months. Exception includes the cases where the competent competition authority, having established an infringement of competition law, has exempted or reduced the fine to be imposed on the Tenderer which has cooperated with it under the leniency programme.

Annex to the declaration in accordance with Sub-clause 4.2

# Information on the Tenderer's communications with competitors in relation to the procurement in question

No.	Competitor company contacted	Type, purpose, nature and content of the communication
	[Merchant's name, reg. No.]	

The additional information provided in the declaration may serve as a basis for the Competition Council to initiate an inquiry into the possible collusion. Requiring declaration does not in itself ensure that there is no collusion or holding the companies which will be found to be parties to such a collusion liable for the aforementioned infringement.

Name of the Tenderer:

Name, surname, position of the	
authorised person:	
Signature of the authorised person <sup>6</sup>	

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<sup>&</sup>lt;sup>6</sup> Not required, when signing the document by using the Electronic Procurement System signature or secure electronic signature.

#### Annex No. 2 to the procurement No. VASES 2022/12

#### **TECHNICAL SPECIFICATION**

#### Open competition

"Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12

### ANNEX No. 1

#### Technical and Services requirements for the

#### Supply and installation of five radio direction-finding systems in Latvia

#### 1. INTRODUCTION

This document contains technical requirements for the supply and installation of five radio directionfinding systems, including general information and overall requirements, technical specifications and services requirements. The purpose of this document is to detail the requirements and to establish criteria for assessing their fulfilment.

#### 2. ABBREVIATIONS

Table below contains list of the abbreviations used in this document.

List of the abbreviations

Abbreviation	Explanation
ECO	Electronic Communications Office of Latvia
FMS	Fixed spectrum Monitoring Station
DF	Direction Finding
SAT	Site Acceptance Test
ppm	Parts Per Million
dB	Decibel
dBµV/m	Decibel microvolts per meter
GHz	Gigahertz
MHz	Megahertz
RMS, r.m.s.	Root Mean Square
AM	Amplitude Modulation
FM	Frequency Modulation
ms	Milliseconds
AoA	Angle of Arrival
ITU	International Telecommunications Union
API	Application Programming Interface
AC	Alternating Current

#### 3. GENERAL INFORMATION

National frequency spectrum administration "Electronic Communications Office of Latvia" (ECO) plans to replace and modernize the existing obsolete signal source direction-finding (DF) systems in five fixed spectrum monitoring stations (FMS) located in Ventspils, Valmiera, Rēzekne, Daugavpils and Rīga. Current Rohde&Schwarz systems has been in operation for more than 20 years, but given that they are both physically and technologically obsolete, they need to be replaced and modernized. As a result of this procurement procedure, it is planned to conclude a contract for the supply, installation and

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integration of five new stationary DF system sets into ECO's existing spectrum monitoring system, according to the technical requirements below.

#### General information on existing equipment to be replaced

There are five fixed monitoring stations in different cities of Latvia with a typical antenna configuration, as shown in Figure 1. The existing DF equipment in all five FMSs consists of similar sets of equipment - Rohde&Schwarz ADD190/ADD195 and ADD071 antennas, which connected to ESMB receivers and DF processors. The direction finding antennas are part of the Rohde&Schwarz antenna complex AU900A5 that installed in each of five FMS. DF receivers and processors are installed in standard 19 "racks, indoors and connected to a DF antenna.



Figure 1 Typical antenna complex (R&S AU900A5) in each of the five FMSs

#### General requirements for the supply and installation of new DF equipment

The winning Tenderer must provide five fully integrated DF systems installed in ECO fixed monitoring stations, located in

- Slokas street 171, Riga;
- Strādnieku street 87, Daugavpils;
- Kr. Valdemāra street 4, Rezekne;
- Gaujas street 7, Valmiera;
- o Inženieru street 77, Ventspils,

including the following elements and services:

- Installation designing;
- Supply of Hardware and Software;
- Installation, integration, start-up and acceptance tests;
- Operation and maintenance (if applicable) manuals;
- As-built documentation including all device configuration information;
- Staff training;
- Technical support, maintenance, repairs and operational supervision during the warranty period, in case if it becomes necessary.

During the procurement procedure, the ECO will provide on-site visits to all five FMSs so that potential Tenderers can assess the situation in each specific FMS, works to be done, materials required and prepare an appropriate bid.

Tenderers must evaluate the electromagnetic and location conditions specific to an FMS and in the technical proposal offer appropriate DF systems that will be fully operational under the specific conditions and meet the requirements below.

Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems" ID No. VASES 2022/12 During the procurement procedure, at the request of the Tenderers, ECO will as far as possible provide additional access to all FMS antenna installation sites to allow the Tenderers make performance testing of the planned new DF equipment. All FMS antennas are installed on multi-storey residential buildings with flat roofs.

The antennas of the DF system must be installed on the existing antenna complex, replacing the existing DF antennas in such a way that the functionality of the antenna complex is not restricted. DF antennas must be connected to DF equipment located at top floor apartment 20 to 40 meters away from DF antenna. Old DF systems must be carefully dismantled and handed over to the ECO.

ECO will provide TCP/IP connection for the remote computer control of the new DF systems as also 230 VAC power supply.

When commissioning new DF systems, the contractor must perform site acceptance tests (SAT) which provides final confirmation to ECO that the systems have met performance requirements. The fulfilment of required DF accuracy must be demonstrated by real signal measurements according to a predefined procedure described in annex 2.

#### 4. STATEMENT OF TECHNICAL REQUIREMENTS

Statement of requirements included in this document cover the following main areas:

- Hardware specifications;
- Programming interface requirements;
- Software specifications;
- Requirements for services and deliverables.

For requirement answers marked with "\*" Tenderer must provide the evidence (via e.g. specifications, datasheets, product brochures, manuals, fact sheets, test reports, white papers, calculations etc.) that the proposed equipment complies with the requirements.

#### **4.1.** DF EQUIPMENT HARDWARE REQUIREMENTS

Req. ID	Description of requirement	Valid answer	Evaluation criteria
Gene	ral requirements		
1.	The DF system equipment must be brand new.	yes	
2.	DF system type must be Angle of Arrival (AoA).	yes	
3.	DF method in the whole required frequency range must be Correlative Interferometer.	yes*	
4.	DF system should be "TDOA ready", that means in this context that system functionality to perform signal source localization using TDOA technology can be added to an existing system as an option in the future if necessary, without changing fundamental system elements, like monitoring receiver / direction finder, antenna switch matrix.	yes*/no	yes + 3 points
5.	DF system must have a built-in self-test.	yes	
6.	It must be possible to power direction finder from the 220 - 230 V 50 Hz AC.	yes	
7.	DF system indoor parts must be 19" standard rack mountable.	yes	
8.	DF equipment must have "CE" marking, which indicates that a product has been assessed by the manufacturer and is considered to comply with EU safety, health and environmental protection requirements.	yes	
9.	Operating temperature range of DF antenna must be at least from - $30^{\circ}$ C to + $35^{\circ}$ C.	yes*	
10.	Lightning protection of DF system against direct hits must be provided.	yes	

Req. ID	Description of requirement	Valid answer	Evaluation criteria
11.	DF antenna with integrated lightning protection (with lightning rod in the centre of DF antenna) should be provided.	yes/no	Yes + 3 points
12.	DF antenna weight must be lower than 55kg.	yes	
13.	Maximal wind speed which DF antenna can withstand must be at least 38 m/s.	yes*	
14.	Ingress protection of DF antenna and parts of the hardware that are intended to be installed outdoor, must be such that can withstand the typical weather conditions in particular locations for at least a decade.	yes	
Perfo	rmance requirements	·	
15.	DF system must be able perform DF measurements for vertically polarised signal at least from 30 MHz to 3 GHz.	Yes*	
16.	DF system should be able perform DF measurements for vertically polarised signal at least from 30 MHz to 6 GHz.	yes/no*	Yes + 15 points
17.	DF system should be able to perform spectrum measurements (DF measurement not required) from 30 MHz to 6 GHz.	yes/no*	Yes + 10 points
18.	DF antenna for the frequency range at least from 87.5 MHz to 970 MHz should be with dual polarization – switchable between vertical and horizontal.	yes/no*	yes + 3 points
19.	Typical DF bearing accuracy of the DF system in frequency range from 30 MHz to 3 GHz must be equal or better than 2° RMS when tested on open-air test facility in reflection-free environment, as per Report ITU-R SM.2125.	Yes*	
20.	Warranted DF bearing accuracy of the DF system in frequency range from 30 MHz to 3 GHz should be equal or better than 1° RMS when tested on open-air test facility in reflection-free environment, as per Report ITU-R SM.2125.	yes/no*	Yes + 2 points
21.	DF Sensitivity of the equipment in frequency range from 30 MHz to 3 GHz referred to 1 kHz DF bandwidth, 1s integration time and 3° accuracy parameters as per recommendation ITU-R SM.2096-0 must be equal or better than 30 dB $\mu$ V/m (100 $\mu$ V/m).	Yes*	
22.	DF Sensitivity of the equipment in frequency range from 30 MHz to 3 GHz referred to 1 kHz DF bandwidth, 1s integration time and 3° accuracy parameters as per recommendation ITU-R SM.2096-0 should be equal or better than 20 dB $\mu$ V/m (10 $\mu$ V/m).	yes/no*	Yes +2 points
23.	Direction-finding minimum signal duration must be equal or less than 1 ms.	yes*	
24.	The minimum frequency tuning resolution must not be higher than 10 Hz.	yes*	
25.	Frequency tuning error should not be higher than $\pm 0.1$ ppm.	yes*/no	Yes +2 points
26.	Frequency tuning error must not be higher than $\pm 1$ ppm.	yes*	
27.	Signal level measurement accuracy must be better or equal to $\pm$ 3dB.	yes*	
28.	Maximal input signal level warranted value should be at least +10 dBm.	yes*/no	Yes + 1 point
29.	Maximal input signal level typical value must be at least +10 dBm.	yes*	
30.	IF rejection warranted value should be equal or higher than 80 dB.	yes*/no	Yes + 1 point

Req. ID	Description of requirement	Valid answer	Evaluation criteria
31.	IF rejection typical value must be equal or higher than 80 dB.	yes*	
32.	Image rejection warranted value should be equal or higher than 80 dB.	yes*/no	Yes + 1 point
33.	Image rejection typical value must be equal or higher than 80 dB.	yes*	
	ionality requirements		
34.	DF system and antenna must implement active/passive switchover, amplification reduction or other techniques that ensure that the maximum permissible level (dB $\mu$ V/m, measured at 12,5 kHz bandwidth) of electromagnetic field strength of a single signal or a combination of several signals at the site of operation of the DF antenna at which the proposed DF system is able to function is at least 116 dB $\mu$ V/m.	yes	
35.	Direction finding bandwidth selection must include at least 5 kHz, 12 kHz, 30 kHz, 120 kHz, 300 kHz, 1 MHz, 5 MHz (+/-30%)	yes	
36.	Direction finding bandwidth selection should include at least 5 kHz, 12 kHz, 30 kHz, 120 kHz, 300 kHz, 1 MHz, 5 MHz, 10 MHz, 20 MHz, 50 MHz (+/-30%)	yes/no	Yes + 5 points
37.	DF system must be able to produce live spectrum of signal being DF- ed with an instantaneous bandwidth of at least 20 MHz.	yes	
38.	DF system should be able to produce live spectrum of signal being DF-ed with an instantaneous bandwidth of at least 50 MHz.	yes/no	Yes + 5 points
39.	DF system should be able to produce live spectrum of signal being DF-ed with resolution at least 10 times finer than DF bandwidth.	yes/no	Yes + 2 points
40.	DF system must be able to produce live spectrum of signal being DF- ed consisting at least of 100 points.	yes	
41.	DF system should be able to produce live spectrum of signal being DF-ed consisting at least of 1000 points.	yes/no	Yes + 2 points
42.	DF system must be able to produce live spectrum of signal being DF- ed at least 2 times per second.	yes	
43.	DF system should be able to produce live spectrum of signal being DF-ed at least 5 times per second.	yes/no	Yes + 2 points
44.	DF system must be able to demodulate at least AM, FM live signals.	yes	
45.	The direction-finding process and the demodulation of AM / FM signals must work simultaneously, i.e. it must be possible to listen to the signal you want to DF.	yes	
46.	DF system must be switchable to receiver mode or otherwise provide spectrum, field strength values and audio not distorted by DF process	yes	
47.	At least "Peak" and "RMS" or equivalent signal level measurement detectors must be available.	yes	
48.	Receiver must have remotely switchable hardware-based attenuator in the range at least from 0 dB to 25 dB.	yes	
49.	Receiver should have remotely switchable hardware-based attenuator in the range at least from 0 dB to 40 dB in 5 dB steps.	yes/no	Yes + 3 points
50.	DF system should be capable to perform bandwidth measurements using $\beta\%$ method (according to recommendation ITU-R SM.443).	Yes/no	Yes + 2 points
51.	DF system should be capable to perform measurements of signal field strength and signal frequency offset from set frequency.	Yes/no	Yes + 2 points
52.	DF antenna must have calibration data for the required frequency band. Tenderer must provide corresponding antenna factor (dB/m).	yes	

# **4.2.** DF SYSTEM PROGRAMMING INTERFACE REQUIREMENTS

Req. ID	Description of requirement	Valid answer	Evaluation criteria
	ral requirements	unowor	ontonia
53.	The DF system's programming interface should be independent of any software (executables, dynamic-link libraries) outside DF equipment. An example of such interface is SCPI commands sent to TCP port of equipment.	yes*/no	yes +10 points
54.	The DF system's programming interface should be SCPI commands or C# API.	yes*/no	yes + 3 points
55.	The DF system's programming interface must be SCPI commands, or C#, or C or C++ API.	yes*	
56.	API specification and necessary installation files of DF system's programming interface must be provided.	yes	
57.	Programming interface must provide control of each direction finder directly and independently from other nodes (like central server) in wider network.	yes	
58.	Programming interface must provide functionality to set all settings that determine measurement results.	yes*	
59.	Programming interface must provide functionality to obtain DF bearing, confidence value and signal level results.	yes*	
60.	Programming interface must provide functionality to obtain spectrum of the signal that is being DF-ed.	yes*	
61.	Programming interface must provide possibility to request measurement, set DF frequency, perform direction finding and spectrum acquisition and receive result in no more than 500 ms in total.	yes	
62.	Programming interface should provide possibility to request measurement, set DF frequency, perform direction finding and spectrum acquisition and receive result in no more than 200 ms in total.	yes/no	Yes + 2 points
63.	Programming interface should provide functionality to digitally obtain demodulated audio of the signal that is being DF-ed.	yes/no	Yes + 2 points
64.	Programming interface should provide functionality to digitally obtain demodulated audio when direction finding is inactive.	yes*/no	Yes + 1 points
65.	Programming interface should provide functionality to obtain spectrum when direction finding is inactive e.g. when equipment used as monitoring receiver.	yes/no	Yes + 2 points
66.	Programming interface should provide functionality to obtain signal field strength and signal frequency offset from set frequency.	yes*/no	Yes + 2 points
67.	Programming interface should provide functionality to obtain signal field strength and occupied bandwidth using $\beta\%$ method (according to ITU-R SM.443).	yes*/no	Yes + 2 points
68.	Programming interface should provide functionality to obtain digital IQ data	yes*/no	Yes + 5 points

# **4.3.** DF EQUIPMENT SOFTWARE REQUIREMENTS

Req. ID	Description of requirement	Valid answer	Evaluation criteria
Gene	ral requirements		
69.	DF Equipment must be provided with GUI software that is able to: - Perform and represent measurements (DF, Spectrum, demodulation e.t.c.) that are offered by Tenderer	yes	

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Req. ID	Description of requirement	Valid answer	Evaluation criteria
	<ul> <li>Configure all settings (DF bandwidth, spectrum resolution e.t.c.) necessary to perform accurate measurements</li> <li>Configure settings (IP address e.t.c.) that are necessary to use programming interface</li> <li>Perform equipment selftest.</li> </ul>		
70.	Software must be compatible with Microsoft Windows 10 operating system.	yes	
71.	Provided GUI software and associated documentation must be in English or Latvian.	yes	
72.	If the capabilities of the DF systems are associated with a specific number of software licenses, the Tenderer must provide a number of licenses that will allow all five FMS to operate simultaneously with full functionality, at least for the one user per one DF system.	yes	

# 4.4. REQUIREMENTS FOR SERVICES AND DELIVERABLES

Req.	Description of requirement	Valid answer	Evaluation criteria	
	lation services of DF systems	answei	CITCEITA	
73.	<ul> <li>New DF systems must be installed by the Tenderer in five fixed monitoring stations, located at the following addresses: <ul> <li>Slokas street 171, Riga;</li> <li>Strādnieku street 87, Daugavpils;</li> <li>Kr. Valdemāra street 4, Rezekne;</li> <li>Gaujas street 7, Valmiera;</li> <li>Inženieru street 77, Ventspils.</li> </ul> </li> <li>NOTE: Before the installation of new DF systems, old DF systems must be carefully dismantled and handed over to the ECO.</li> </ul>	yes		
74.	DF bearing accuracy of the DF system, when installed and tested during SAT in a particular FMS using methodology described in annex 2, must be equal or better than 5° RMS.	yes		
75.	Overall DF system's construction height (including lightning protection) must not be higher of existing DF system.	yes		
76.	The antennas of the DF system must be installed on the existing antenna complex, replacing the existing DF antennas in such a way that the functionality of the antenna complex is not restricted.	yes		
77.	DF antennas must be connected to DF equipment located at top floor apartment 20 to 40 meters away from DF antenna.	yes		
78.	Contractor must prepare the antenna exchange project for each of five FMS. Developed technical projects must be agreed with customer in writing.	yes		
79.	Construction works must be carried out in accordance to the approved technical projects and the plan for the organization of the construction works.	yes		
80.	Any changes in the technical projects, legal documents or deadlines must be recorded by the contractor in writing and agreed with ECO.	yes		
Project management				
81.	The Tenderer must develop, propose and agree with the customer a project plan for the installation, testing and acceptance testing of DF systems. This project plan must illustrate all project activities, dependencies and responsibilities against time. This project plan must illustrate critical milestones. The Tenderer's plan must clearly illustrate the start and end dates of each of these activities.	yes		

Req. ID	Description of requirement	Valid answer	Evaluation criteria
	ces for the use of any intellectual property		
82.	The Tenderer must provide with its technical deliverables all necessary licences for the use of any intellectual property held or supplied by the Tenderer, its subcontractors and its partners. These licenses must grant the ECO perpetual, irrevocable use of the hardware and software including API supplied containing this intellectual property. Payment for these licenses must be included within invoicing for the contract as a whole and no further charges can be applied.	yes	
	ary technical deliverables		
83.	The Tenderer must document all system elements supplied, using drawings and handbooks, to illustrate the DF systems as-built. This documentation must cover all standard products, all customised products and the integration of the subsystems (if applicable).	yes	
	Jage support		
84.	The Tenderer must supply all the relevant system documents in English or Latvian.	yes	
Traini			
85.	Contractor must provide theoretical and practical training to work with supplied and installed DF systems. Training must be provided for up to ten people from the ECO (accommodation and travel expenses for training abroad must be covered by contractor).	yes	
Testir	ng and commissioning		
86.	The Tenderer must undertake on-site acceptance testing (SAT) witnessed by the customer to prove that the requirements set out in this specification have been met. SAT procedure must be mutually agreed before testing.	yes	
Softw	are maintenance		
Note: Softw event	are maintenance is defined as the provision of new software in response t	vare must U-R recom	change as mendations
	<ul> <li>revisions, patches and other changes in order to respond to one or more of the five events above during warranty period:</li> <li>correction of bugs in the software;</li> <li>in reaction to hardware and operating system changes (when hardware must change as technology evolves);</li> <li>to permit changes in measurement methods, if changes are made to ITU-R recommendations or other changes independent of the customer;</li> <li>to response to requests for problem questions and proposals;</li> <li>generally, to take advantage of evolving functionality as the Tenderer develops its product offering.</li> <li>The Tenderer must set out its approach to software maintenance and approach generally to ensure that the customer will be able to maintain software operation.</li> </ul>		

Req. ID	Description of requirement	Valid answer	Evaluation criteria
88.	During the DF systems warranty period contractor must bring attention to all software faults and irregularities and must analyse and determine cause. The Tenderer must specify in its proposal typical time for fixing the issues.	yes	Chiena
89.	During the DF systems warranty period contractor must provide information and offers regarding new software versions and new software of interest to the customer, as well as improvements of delivered software.	yes	
90.	The Tenderer must fully detail DF systems hardware and software maintenance program which must be executed during the warranty period. Legal conditions and procedures of repairing and/or replacing faulty equipment during the warranty period and outside of the warranty period must be described.	yes	
91.	The Tenderer must include all maintenance costs in Financial proposal and ensure that maintenance will be provided during the offered warranty period.	yes	
Hardv	vare and software warranty		
92.	The Tenderer must guarantee that throughout the warranty and maintenance period all materials and workmanship are free from defect.	yes	
93.	The warranty and maintenance period of all DF systems must be at least 36 months.	yes	
Produ	ict support		
94.	Technical remote support must be included in the offer for the first year. At least 40 (forty) man-hours must be included.	yes	
95.	Product support (hardware and software of DF systems) must be provided for a period of ten (10) years from the date of handing over the DF systems to the customer. Support must entail supply of spares for and repair of non- obsolete products. Manufacturer must provide the repair service to the obsolete items where economically viable. For obsolete products that are Beyond Economic Repair (BER), the Tenderer must assist the customer in finding and integrating a solution at the cost of customer.	Yes/no	Yes + 3 points

# ANNEX No. 2

## Method of determining DF accuracy for the

# Supply and installation of five radio direction-finding systems in Latvia

# **INTRODUCTION**

This document contains technical method of determining DF accuracy for the Supplied and installed of five radio direction-finding systems in Latvia.

#### **ABBREVIATIONS**

Table below contains list of the abbreviations used in this document.

List of the abbreviations

Abbreviation	Explanation
FMS	Fixed spectrum Monitoring Station
DF	Direction Finding
GHz	Gigahertz
MHz	Megahertz

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Abbreviation	Explanation
RMS	Root Mean Square
CW	Continuous wave
W	Watt
ECO	Electronic Communications Office of Latvia

#### Procedure of determining on-SITE accuracy of df system

DF system must be tested in operational conditions fully installed (including lightning protection) at the actual FMS. Two tests must be conducted and will contribute to overall direction finding accuracy for particular monitoring site: (1) Test using a test transmitter whose frequency and location can be controlled and which will transmit CW signals and (2) Test using signals from existing FM broadcast stations at known, fixed locations.

#### 1.1. TEST USING CONTROLLED TEST TRANSMITTER

Test implies that signal transmitted from agreed locations at defined frequencies will be DF-ed at monitoring station under the test. Bearing found by DF system, then will be compared to the bearing between DF system and test transmitter coordinates, and resulting error will be included in calculation of RMS accuracy.

Transmitter setup must consist of transmitter connected to transmitting antenna. Transmitter must not exceed 5 W of transmit power and maximum of transmission length of 5 seconds. Signal used for test must be unmodulated (CW) carrier. Type of transmitting antenna and height of its installation can be varied to achieve best DF conditions, however height must not exceed 10 meters above ground level.

Test transmit locations has to be chosen to obtain at least four well-distributed azimuth values within 360 degrees (one per quadrant) from DF system. The difference between any two adjacent test angles should be no less than 75 degrees. Particular transmit location will be chosen to minimize reflections and maximize received power at DF system. However, if any of bearing errors reach +/-  $30^{\circ}$ , transmission location has to be changed for another.

Total of 15 frequencies will DF-ed for each direction (30 MHz, 35 MHz, 40 MHz, 45 MHz, 50 MHz, 60 MHz, 70 MHz, 80 MHz, 87 MHz, 150.275 MHz, 160 MHz, 170 MHz, 410 MHz, 442.575 MHz and 469 MHz). DF settings (DF bandwidth, averaging time, amplification) can be modified for each frequency to achieve highest accuracy.

#### **1.2.** TEST USING SIGNALS KNOWN FM BROADCAST STATIONS

Test implies that signal transmitted from known FM broadcast stations at defined frequencies will be DF-ed at monitoring station under the test. Bearing found by DF system, then will be compared to the bearing between DF system and FM broadcast station coordinates, and resulting error will be included in calculation of RMS accuracy.

There are 6 FM broadcast stations with vertical polarisation emissions selected for test signals for each FMS. Additionally, 2 FM broadcasting stations have been selected to replace 2 of initial 6, if sustained essential change of parameters. DF settings (DF bandwidth, averaging time, amplification, quality) can be modified for each frequency to achieve highest accuracy.

Following test frequencies are selected to test DF system at Slokas street 171, Riga: 101.0 MHz, 89.2 MHz, 94.9 MHz, 88.6 MHz, 96.2 MHz, 99.0 MHz, 97.3 MHz (additional), 94.5 MHz (additional).

Following test frequencies are selected to test DF system at Strādnieku street 87, Daugavpils: 107.2 MHz, 88.7 MHz, 96.7 MHz, 99.4 MHz, 101.6 MHz, 99.9 MHz, 105.2 MHz (additional), 100.7 MHz (additional).

Following test frequencies are selected to test DF system at Kr. Valdemāra street 4, Rezekne: 91.4 MHz, 91.9 MHz, 103.0 MHz, 103.8 MHz, 105.1 MHz, 106.5 MHz, 101.4 MHz (additional), 105.5 MHz (additional).

Following test frequencies are selected to test DF system at Gaujas street 7, Valmiera: 89.5 MHz, 88.2 MHz, 103.4 MHz, 107.4 MHz, 100.9 MHz, 94.0 MHz, 87.6 MHz (additional), 94.6 MHz (additional).

Following test frequencies are selected to test DF system at Inženieru street 77, Ventspils: 97.8 MHz, 105.4 MHz, 89.8 MHz, 95.3 MHz, 103.0 MHz, 107.9 MHz, 93.7 MHz (additional), 100.5 MHz (additional).CALCULATION OF DF RMS ACCURACY

Following steps should be taken to calculate DF RMS accuracy:

- Complete data set of DF test measurement should contain 66 DF measurement error values one per 4 directions and 15 frequencies and additional 6 for broadcast stations. If during 5 second transmission period more than one DF measurement have been performed, median value should be recorded as result.
- 2. Average of all 66 error values should be taken and subtracted from each individual error value, hence calculating corrected error values;
- 3. Six out of all 66 corrected error values with highest absolute values should be discarded as outliers;
- 4. The RMS value of the bearing error  $\Delta_{\text{RMS}}$  is calculated from corrected error values excluding outliers using the formula:

$$\Delta_{RMS} = \sqrt{\frac{1}{60} \sum_{i=1}^{60} \Delta_i^2};$$

5. The RMS value of bearing error and all 66 measured DF error values and corresponding bearings should be recorded and provided to ECO.

Annex No. 3 to the procurement No. VASES 2022/12

#### TECHNICAL PROPOSAL (FORM)

Open competition

"Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12

\_\_\_\_ 2022

(Tenderer's name, taxpayer registration code)

offers to the SJSC "Electronic Communication Office" to perform the order within the framework of an open competition "Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/123.

In accordance with the Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12 (hereinafter referred to as – the Regulations), I hereby offer to the SJSC "Electronic Communication Office" to deliver 5 (five) radio frequency direction finding systems in accordance with the requirements specified in Annex No. 2 "Technical Specifications", and I undertake to provide:

- delivery of 5 (five) radio frequency direction finding systems within \_\_\_\_\_ (\_\_\_\_\_) calendar days from the date of conclusion of the contract in accordance with the requirements set out in Annex No. 2 "Technical Specifications" to the Regulations;
- a warranty of the delivered radio frequency direction finding systems for \_\_\_\_\_(\_\_\_\_) months from the date of mutual signing of the transfer-acceptance certificate;
- Training course \_\_\_\_\_\_\_ for the staff of the SJSC "Electronic Communication Office".

#### TECHNICAL PROPOSAL FORM

For requirement answers marked with "\*" Tenderer must provide the evidence (via e.g. specifications, datasheets, product brochures, manuals, fact sheets, test reports, white papers, calculations etc.) that the proposed equipment complies with the requirements.

4.1. DF EQUIPMENT HARDWARE REQUIREMENTS					
The requirements specified in the technical specification					
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer	
	General requirements				
1.	The DF system equipment must be brand new.	yes			

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	4.1. DF EQUIPMENT HARDWARE REQUIREMENTS				
	The requirements specified in the technical specifica				
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer	
2.	DF system type must be Angle of Arrival (AoA).	yes			
3.	DF method in the whole required frequency range must be Correlative Interferometer.	yes*			
4.	DF system should be "TDOA ready", that means in this context that system functionality to perform signal source localization using TDOA technology can be added to an existing system as an option in the future if necessary, without changing fundamental system elements, like monitoring receiver / direction finder, antenna switch matrix.	yes*/no	yes + 3 points		
5.	DF system must have a built-in self-test.	yes			
6.	It must be possible to power direction finder from the 220 - 230 V 50 Hz AC.	yes			
7.	DF system indoor parts must be 19" standard rack mountable.	yes			
8.	DF equipment must have "CE" marking, which indicates that a product has been assessed by the manufacturer and is considered to comply with EU safety, health and environmental protection requirements.	yes			
9.	Operating temperature range of DF antenna must be at least from - $30^{\circ}$ C to + $35^{\circ}$ C.	yes*			
10.	Lightning protection of DF system against direct hits must be provided.	yes			
11.	DF antenna with integrated lightning protection (with lightning rod in the centre of DF antenna) should be provided.	yes/no	Yes + 3 points		
12.	DF antenna weight must be lower than 55kg.	yes			
13.	Maximal wind speed which DF antenna can withstand must be at least 38 m/s.	yes*			
14.	Ingress protection of DF antenna and parts of the hardware that are intended to be installed outdoor, must be such that can withstand the typical weather conditions in particular locations for at least a decade. mance requirements	yes			
Fenon					

	4.1. DF EQUIPMENT HARDWA	ARE REQUIREME	INTS	
	The requirements specified in the technical specifica			
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
15.	DF system must be able perform DF measurements for vertically polarised signal at least from 30 MHz to 3 GHz.	Yes*		
16.	DF system should be able perform DF measurements for vertically polarised signal at least from 30 MHz to 6 GHz.	yes/no*	Yes + 15 points	
17.	DF system should be able to perform spectrum measurements (DF measurement not required) from 30 MHz to 6 GHz.	yes/no*	Yes + 10 points	
18.	DF antenna for the frequency range at least from 87.5 MHz to 970 MHz should be with dual polarization – switchable between vertical and horizontal.	yes/no*	yes + 3 points	
19.	Typical DF bearing accuracy of the DF system in frequency range from 30 MHz to 3 GHz must be equal or better than 2° RMS when tested on open-air test facility in reflection-free environment, as per Report ITU-R SM.2125.	Yes*		
20.	Warranted DF bearing accuracy of the DF system in frequency range from 30 MHz to 3 GHz should be equal or better than 1° RMS when tested on open-air test facility in reflection-free environment, as per Report ITU-R SM.2125.	yes/no*	Yes + 2 points	
21.	DF Sensitivity of the equipment in frequency range from 30 MHz to 3 GHz referred to 1 kHz DF bandwidth, 1s integration time and 3° accuracy parameters as per recommendation ITU-R SM.2096-0 must be equal or better than 30 dB $\mu$ V/m (100 $\mu$ V/m).	Yes*		
22.	DF Sensitivity of the equipment in frequency range from 30 MHz to 3 GHz referred to 1 kHz DF bandwidth, 1s integration time and 3° accuracy parameters as per recommendation ITU-R SM.2096-0 should be equal or better than 20 dB $\mu$ V/m (10 $\mu$ V/m).	yes/no*	Yes +2 points	
23.	Direction-finding minimum signal duration must be equal or less than 1 ms.	yes*		
24.	The minimum frequency tuning resolution must not be higher than 10 Hz.	yes*		
25.	Frequency tuning error should not be higher than $\pm 0.1$ ppm.	yes*/no	Yes +2 points	

	4.1. DF EQUIPMENT HARDWA	ARE REQUIREME	INTS	
	The requirements specified in the technical specifica			
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
26.	Frequency tuning error must not be higher than $\pm 1$ ppm.	yes*		
27.	Signal level measurement accuracy must be better or equal to $\pm$ 3dB.	yes*		
28.	Maximal input signal level warranted value should be at least +10 dBm.	yes*/no	Yes + 1 point	
29.	Maximal input signal level typical value must be at least +10 dBm.	yes*		
30.	IF rejection warranted value should be equal or higher than 80 dB.	yes*/no	Yes + 1 point	
31.	IF rejection typical value must be equal or higher than 80 dB.	yes*		
32.	Image rejection warranted value should be equal or higher than 80 dB.	yes*/no	Yes + 1 point	
33.	Image rejection typical value must be equal or higher than 80 dB.	yes*		
Functi	onality requirements			
34.	DF system and antenna must implement active/passive switchover, amplification reduction or other techniques that ensure that the maximum permissible level (dB $\mu$ V/m, measured at 12,5 kHz bandwidth) of electromagnetic field strength of a single signal or a combination of several signals at the site of operation of the DF antenna at which the proposed DF system is able to function is at least 116 dB $\mu$ V/m.	yes		
35.	Direction finding bandwidth selection must include at least 5 kHz, 12 kHz, 30 kHz, 120 kHz, 300 kHz, 1 MHz, 5 MHz (+/-30%)	yes		
36.	Direction finding bandwidth selection should include at least 5 kHz, 12 kHz, 30 kHz, 120 kHz, 300 kHz, 1 MHz, 5 MHz, 10 MHz, 20 MHz, 50 MHz (+/-30%)	yes/no	Yes + 5 points	
37.	DF system must be able to produce live spectrum of signal being DF- ed with an instantaneous bandwidth of at least 20 MHz.	yes		
38.	DF system should be able to produce live spectrum of signal being DF-ed with an instantaneous bandwidth of at least 50 MHz.	yes/no	Yes + 5 points	
39.	DF system should be able to produce live spectrum of signal being DF-ed with resolution at least 10 times finer than DF bandwidth.	yes/no	Yes + 2 points	
40.	DF system must be able to produce live spectrum of signal being DF- ed consisting at least of 100 points.	yes		

	4.1. DF EQUIPMENT HARDWA	ARE REQUIREME	NTS	
	The requirements specified in the technical specifica			
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
41.	DF system should be able to produce live spectrum of signal being DF-ed consisting at least of 1000 points.	yes/no	Yes + 2 points	
42.	DF system must be able to produce live spectrum of signal being DF- ed at least 2 times per second.	yes		
43.	DF system should be able to produce live spectrum of signal being DF-ed at least 5 times per second.	yes/no	Yes + 2 points	
44.	DF system must be able to demodulate at least AM, FM live signals.	yes		
45.	The direction-finding process and the demodulation of AM / FM signals must work simultaneously, i.e. it must be possible to listen to the signal you want to DF.	yes		
46.	DF system must be switchable to receiver mode or otherwise provide spectrum, field strength values and audio not distorted by DF process	yes		
47.	At least "Peak" and "RMS" or equivalent signal level measurement detectors must be available.	yes		
48.	Receiver must have remotely switchable hardware-based attenuator in the range at least from 0 dB to 25 dB.	yes		
49.	Receiver should have remotely switchable hardware-based attenuator in the range at least from 0 dB to 40 dB in 5 dB steps.	yes/no	Yes + 3 points	
50.	DF system should be capable to perform bandwidth measurements using $\beta\%$ method (according to recommendation ITU-R SM.443).	Yes/no	Yes + 2 points	
51.	DF system should be capable to perform measurements of signal field strength and signal frequency offset from set frequency.	Yes/no	Yes + 2 points	
52.	DF antenna must have calibration data for the required frequency band. Tenderer must provide corresponding antenna factor (dB/m).	yes		

	4.2. DF SYSTEM PROGRAMMING INTERFACE REQUIREMENTS					
The requirements specified in the technical specification						
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer		
General r	General requirements					

	4.2. DF SYSTEM PROGRAMMING	INTERFACE REQ	UIREMENTS	
	The requirements specified in the technical specific			
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
53.	The DF system's programming interface should be independent of any software (executables, dynamic-link libraries) outside DF equipment. An example of such interface is SCPI commands sent to TCP port of equipment.	yes*/no	yes +10 points	
54.	The DF system's programming interface should be SCPI commands or C# API.	yes*/no	yes + 3 points	
55.	The DF system's programming interface must be SCPI commands, or C#, or C or C++ API.	yes*		
56.	API specification and necessary installation files of DF system's programming interface must be provided.	yes		
57.	Programming interface must provide control of each direction finder directly and independently from other nodes (like central server) in wider network.	yes		
58.	Programming interface must provide functionality to set all settings that determine measurement results.	yes*		
59.	Programming interface must provide functionality to obtain DF bearing, confidence value and signal level results.	yes*		
60.	Programming interface must provide functionality to obtain spectrum of the signal that is being DF-ed.	yes*		
61.	Programming interface must provide possibility to request measurement, set DF frequency, perform direction finding and spectrum acquisition and receive result in no more than 500 ms in total.	yes		
62.	Programming interface should provide possibility to request measurement, set DF frequency, perform direction finding and spectrum acquisition and receive result in no more than 200 ms in total.	yes/no	Yes + 2 points	
63.	Programming interface should provide functionality to digitally obtain demodulated audio of the signal that is being DF-ed.	yes/no	Yes + 2 points	
64.	Programming interface should provide functionality to digitally obtain demodulated audio when direction finding is inactive.	yes*/no	Yes + 1 points	

	4.2. DF SYSTEM PROGRAMMING INTERFACE REQUIREMENTS				
	The requirements specified in the technical specific				
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer	
65.	Programming interface should provide functionality to obtain spectrum when direction finding is inactive e.g. when equipment used as monitoring receiver.	yes/no	Yes + 2 points		
66.	Programming interface should provide functionality to obtain signal field strength and signal frequency offset from set frequency.	yes*/no	Yes + 2 points		
67.	Programming interface should provide functionality to obtain signal field strength and occupied bandwidth using $\beta\%$ method (according to ITU-R SM.443).	yes*/no	Yes + 2 points		
68.	Programming interface should provide functionality to obtain digital IQ data	yes*/no	Yes + 5 points		

	4.3. DF EQUIPMENT SOFTWARE REQUIREMENTS				
	The requirements specified in the technical specific				
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer	
Gener	al requirements				
69.	<ul> <li>DF Equipment must be provided with GUI software that is able to:</li> <li>Perform and represent measurements (DF, Spectrum, demodulation e.t.c.) that are offered by Tenderer</li> <li>Configure all settings (DF bandwidth, spectrum resolution e.t.c.) necessary to perform accurate measurements</li> <li>Configure settings (IP address e.t.c.) that are necessary to use programming interface</li> <li>Perform equipment selftest.</li> </ul>	yes			
70.	Software must be compatible with Microsoft Windows 10 operating system.	yes			
71.	Provided GUI software and associated documentation must be in English or Latvian.	yes			
72.	If the capabilities of the DF systems are associated with a specific number of software licenses, the Tenderer must provide a number of licenses that will allow all five FMS to operate simultaneously with full functionality, at least for the one user per one DF system.	yes			

	4.4. REQUIREMENTS FOR SERV	ICES AND DELIV	/ERABLES	
	The requirements specified in the technical specific	ation		
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
Install	ation services of DF systems	•		
73.	<ul> <li>New DF systems must be installed by the Tenderer in five fixed monitoring stations, located at the following addresses: <ul> <li>Slokas street 171, Riga;</li> <li>Strādnieku street 87, Daugavpils;</li> <li>Kr. Valdemāra street 4, Rezekne;</li> <li>Gaujas street 7, Valmiera;</li> <li>Inženieru street 77, Ventspils.</li> </ul> </li> <li>NOTE: Before the installation of new DF systems, old DF systems must be carefully dismantled and handed over to the ECO.</li> </ul>	yes		
74.	DF bearing accuracy of the DF system, when installed and tested during SAT in a particular FMS using methodology described in annex 2, must be equal or better than 5° RMS.	yes		
75.	Overall DF system's construction height (including lightning protection) must not be higher of existing DF system.	yes		
76.	The antennas of the DF system must be installed on the existing antenna complex, replacing the existing DF antennas in such a way that the functionality of the antenna complex is not restricted.	yes		
77.	DF antennas must be connected to DF equipment located at top floor apartment 20 to 40 meters away from DF antenna.	yes		
78.	Contractor must prepare the antenna exchange project for each of five FMS. Developed technical projects must be agreed with customer in writing.	yes		
79.	Construction works must be carried out in accordance to the approved technical projects and the plan for the organization of the construction works.	yes		
80.	Any changes in the technical projects, legal documents or deadlines must be recorded by the contractor in writing and agreed with ECO.	yes		
-	t management			i
81.	The Tenderer must develop, propose and agree with the customer a project plan for the installation, testing and acceptance testing of DF systems. This project plan must illustrate all project activities,	yes		

	4.4. REQUIREMENTS FOR SERV		/ERABLES	
	The requirements specified in the technical specific			
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
	dependencies and responsibilities against time. This project plan must illustrate critical milestones. The Tenderer's plan must clearly illustrate the start and end dates of each of these activities.			
Licenc	es for the use of any intellectual property			
82.	The Tenderer must provide with its technical deliverables all necessary licences for the use of any intellectual property held or supplied by the Tenderer, its subcontractors and its partners. These licenses must grant the ECO perpetual, irrevocable use of the hardware and software including API supplied containing this intellectual property. Payment for these licenses must be included within invoicing for the contract as a whole and no further charges can be applied.	yes		
Ancilla	ary technical deliverables			
83.	The Tenderer must document all system elements supplied, using drawings and handbooks, to illustrate the DF systems as-built. This documentation must cover all standard products, all customised products and the integration of the subsystems (if applicable).	yes		
Langu	age support			
84.	The Tenderer must supply all the relevant system documents in English or Latvian.	yes		
Trainir	ng			
85.	Contractor must provide theoretical and practical training to work with supplied and installed DF systems. Training must be provided for up to ten people from the ECO (accommodation and travel expenses for training abroad must be covered by contractor).	yes		
Testin	g and commissioning			
86.	The Tenderer must undertake on-site acceptance testing (SAT) witnessed by the customer to prove that the requirements set out in this specification have been met. SAT procedure must be mutually agreed before testing.	yes		
Softwa	are maintenance			
Note: Softwa	are maintenance is defined as the provision of new software in respons	se to one or mo	re of five events:	

	4.4. REQUIREMENTS FOR SERV	ICES AND DELIN	/ERABLES	
	The requirements specified in the technical specific	ation		
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
	<ul> <li>correction of bugs in the software;</li> <li>in reaction to hardware and operating system changes (when ha</li> <li>to permit changes in measurement methods, if changes are m customer;</li> <li>to response to requests for problem questions and proposals;</li> <li>generally, to take advantage of evolving functionality as the Tendo</li> </ul>	ade to ITU-R re	commendations	or other changes independent of the
87.	<ul> <li>The Tenderer must provide the customer with software, or software revisions, patches and other changes in order to respond to one or more of the five events above during warranty period:</li> <li>correction of bugs in the software;</li> <li>in reaction to hardware and operating system changes (when hardware must change as technology evolves);</li> <li>to permit changes in measurement methods, if changes are made to ITU-R recommendations or other changes independent of the customer;</li> <li>to response to requests for problem questions and proposals;</li> <li>generally, to take advantage of evolving functionality as the Tenderer develops its product offering.</li> <li>The Tenderer must set out its approach to software maintenance and approach generally to ensure that the customer will be able to maintain software operation.</li> </ul>	yes		
88.	During the DF systems warranty period contractor must bring attention to all software faults and irregularities and must analyse and determine cause. The Tenderer must specify in its proposal typical time for fixing the issues.	yes		
89.	During the DF systems warranty period contractor must provide information and offers regarding new software versions and new software of interest to the customer, as well as improvements of delivered software.	yes		
90.	The Tenderer must fully detail DF systems hardware and software maintenance program which must be executed during the warranty period. Legal conditions and procedures of repairing and/or	yes		

	4.4. REQUIREMENTS FOR SERV	ICES AND DELIN	/ERABLES	
	The requirements specified in the technical specific			
Req. ID	Description of requirement	Valid answer	Evaluation criteria	Tenderer's offer
	replacing faulty equipment during the warranty period and outside of the warranty period must be described.			
91.	The Tenderer must include all maintenance costs in Financial proposal and ensure that maintenance will be provided during the offered warranty period.	yes		
Hardw	vare and software warranty	,		
92.	The Tenderer must guarantee that throughout the warranty and maintenance period all materials and workmanship are free from defect.	yes		
93.	The warranty and maintenance period of all DF systems must be at least 36 months.	yes		
Produ	ct support			
94.	Technical remote support must be included in the offer for the first year. At least 40 (forty) man-hours must be included.	yes		
95.	Product support (hardware and software of DF systems) must be provided for a period of ten (10) years from the date of handing over the DF systems to the customer. Support must entail supply of spares for and repair of non-obsolete products. Manufacturer must provide the repair service to the obsolete items where economically viable. For obsolete products that are Beyond Economic Repair (BER), the Tenderer must assist the customer in finding and integrating a solution at the cost of customer.	Yes/no	Yes + 3 points	

#### Annexes:

- Detailed description of the proposal \_\_\_\_\_\_ (Tenderer's name) (technical information where the Contracting Authority can verify compliance of the offered radio frequency direction finding systems with the requirements set out in the Technical Specification) on \_\_\_\_ (\_\_\_\_\_) pages;
- Hardware warranty terms on \_\_\_\_ (\_\_\_\_) pages;
- Software maintenance terms during the warranty period on \_\_\_\_ (\_\_\_\_\_) pages.

In order to confirm compliance of the hardware and software offered with the competition requirements, the Tenderer as a part of its proposal documents must submit at least the following documentary evidence:

- A comment for each item of the Technical Specification which would demonstrate how the Tenderer will ensure fulfilment of the specific requirement. Comments should include clear cross-references to the relevant pages in the supporting materials;
- Supporting material to substantiate the comments made under the items of the Technical Specification, such as the manufacturer's specifications, data sheets, product brochures, user manuals, fact sheets, and the like.

## Annex No. 4 to the procurement No. VASES 2022/12

# FINANCIAL PROPOSAL (FORM)

#### Open competition

"Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12

#### 1 SUBMITTED BY

Tenderer's name	Details

#### 2 CONTACT PERSON

Name, surname	
Address	
Tel. / Fax	
e-mail address	

## 3. FINANCIAL PROPOSAL

Name	Unit	Amoun t	Costs EUR excluding VAT for 1 unit	Total costs EUR excluding VAT	VAT% (EUR)	Total costs EUR incl. VAT
RadioFrequencyDirection Finding Systemand Software(incl.maintenanceduring thewarranty period)	pieces	5	<>	<>	<>	<>
Installation of a radio frequency direction finding system	pieces	5	<>	<>	<>	<>
Training for the Contracting Authority's employees (Technical Specification requirement No. 85)	persons	10	<>	<>	<>	<>
		TOTAL:	<>	<>	<>	<>

Payment terms:

Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems"

- □ supply and installation of the radio frequency direction finding system and training requires an advance payment in the amount of \_\_\_\_\_% (\_\_\_\_\_\_) (not exceeding 20%) of the total costs;
- □ supply and installation of the radio frequency direction finding system and training does not require an advance payment.

## Annex No. 5 to the procurement No. VASES 2022/12

#### INFORMATION ON THE TENDERER (FORM)

Open competition

"Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12

1. Information on the Tenderer's experience in the manufacture/distribution of radio frequency direction finding systems (in accordance with Clause 18.1 of the Regulations):

No.	Contract period (year, month)	Description of the subject-matter of the contract (volume, amount)	Contracting Authority	Contracting Authority's contact information
1	<>	<>	<>	<>
<>	<>	<>	<>	<>
<>	<>	<>	<>	<>

2. Information on the service authorised by the manufacturer of the radio frequency direction finding systems which will provide the warranty service for the proposed radio frequency direction finding systems (in accordance with Clause 18.2 of the Regulations):

No.	Service centre name	Service centre address
1	<>	<>
<>	<>	<>
<>	<>	<>

# Annex No. 6 to the procurement No. VASES 2022/12

## DECLARATION (FORM) OF THE SUBCONTRACTOR OR PERSON

#### Open competition

"Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12

Submitted by:

Name of the subcontractor/person whose capabilities the tenderer relies on to demonstrate that its qualifications meet the requirements set out in the notice of intended contract or in the procurement documents	<b>Details</b> (legal address, unified registration number, taxpayer's registration number)

hereinafter referred to as – "Subcontractor/Person" (delete as appropriate).

1. Contact person:

Name, surname	
Address	
Tel.	
E-mail address	

Please indicate whether the Subcontractor's/Person's company qualifies as a small\* or mediumsized\*\* enterprise.

The Subcontractor/Person/name/ is a \_\_\_\_\_/indicate small or medium-sized enterprise/.

\* Small enterprise employing fewer than 50 persons and with the annual turnover and/or with an annual balance sheet in total not exceeding 10 million euro;

\*\* Medium-sized enterprise, other than a small enterprise employing fewer than 250 persons and with the annual turnover not exceeding 50 million and/or with an annual balance sheet in total not exceeding 43 million euro.

The Subcontractor/Person, represented by its <official's position, name, surname>, acting on the basis of the <articles of association/power of attorney> hereby:

- 1. agrees to participate in the open competition "Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12, as a Subcontractor/Person of *<Tenderer's name, registration number and address>*;
- 2. certifies that the Subcontractor/Person has the professional, technical and organisational capacity, personnel, financial resources and infrastructure necessary to perform the part of the subject-matter of the procurement assigned to the Subcontractor/Person;
- 3. certifies that \_\_\_\_\_\_ (name of the Subcontractor) does not meet the exclusion conditions referred to in Section 42, Paragraph One, Clauses 1, 2, 3, 4, 6 or 7 of the Public Procurement Law;
- 4. certifies that \_\_\_\_\_\_ (name of the Subcontractor), member of its board and/or

Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems" ID No. VASES 2022/12

council, true beneficial owner, person entitled to represent and/or procurator are not subject to international or national sanctions or to sanctions imposed by a Member State of the European Union or North Atlantic Treaty Organisation that affect significant financial and capital market interests and that it does not conform to the provisions of Article (5)(k)(1) of the Regulation (EU) No. 833/2014 of the European Parliament and of the Council of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine and undertake to inform the Contracting Authority immediately of any changes to the given declaration;

- 5. if the procurement contract will be concluded with the Tenderer, the Subcontractor/Person undertakes to provide the following services to the Contracting Authority <short description of the part of the subject-matter to be assigned to the Subcontractor/Person as indicated in the list of the Tenderer's subcontractors and/or the persons, and/or members of the association of suppliers, and parts of the subject-matter to be subcontracted, percentage of services to be provided>;
- 6. certifies that all the information provided is true;
- 7. certifies that the personal data included in the proposal have been collected and processed in accordance with the requirements for such data processing set out in the laws and regulations, in compliance with the requirements of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and that the Tenderer has obtained the consent of the person to transfer the data to the Contracting Authority. The person agrees to the processing of personal data for the purposes of public procurement and storage of procurement documents in accordance with the Public Procurement Law and the laws governing the management of the European Union Funds and, in the cases stipulated in the Public Procurement Law and the laws governing the transfer of personal data to the Procurement Monitoring Bureau and/or the Official Journal of the European Union, and/or the Central Finance and Contracting Agency, and/or other institutions involved in the management of the European Union Funds, and/or the Administrative District Court.

Name of subcontractor/person:

Signature of the authorised person<sup>78</sup>

Name, surname, position of the authorised person:	

<sup>&</sup>lt;sup>7</sup> Not necessary to complete when signing the document with an EIS signature or a secure electronic signature.

<sup>&</sup>lt;sup>8</sup> To be signed by a person entitled to represent the Subcontractor/Person whose capabilities the tenderer relies on to certify that its qualifications meet the requirements laid down in the notice of intended contract or in the procurement documents (according to the entries in the commercial register) or by an authorised person (in which case a power of attorney or a certified copy thereof must be attached to the proposal).

Regulations of the open competition "Purchase of Radio Frequency Direction Finding Systems" ID No. VASES 2022/12

# Annex No. 7 to the procurement No. VASES 2022/12

#### CONTRACT (draft)

#### on supply of radio frequency direction finding systems

#### Contracting Authority's Contract No. {{DOKREGNUMURS}}

Contractor's Contract No.

Riga

The date of signature of the Contract is the date of the last attached time stamp of the secure electronic signature

**State Joint-Stock Company "Electronic Communication Office",** unified registration No. 40003021907, legal address: 5 Eksporta street, Riga, LV-1010, Latvia (hereinafter referred to as – the Contracting Authority), represented by its \_\_\_\_\_\_ acting on the basis of \_\_\_\_\_\_, on the one part, and

\_\_\_\_\_, unified registration No. \_\_\_\_\_, legal address: \_\_\_\_\_\_(hereinafter referred to as – the "Contractor"), represented by its \_\_\_\_\_\_ acting on the basis of \_\_\_\_\_\_, on the other part,

both jointly referred to as – the "Parties", individually – as the "Party", on the basis of results of the open competition "Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12 (hereinafter referred to as – the "Competition"), by a mutual agreement, without fraud, mistake and duress, in compliance with the requirements of laws and regulations, enter into the following Contract (hereinafter referred to as – the "Contract"):

## 1. SUBJECT-MATTER OF THE CONTRACT

- 1.1. The Contracting Authority shall purchase, and the Contractor shall sell, deliver and install 5 (five) radio frequency direction finding systems (hereinafter referred to as the "Goods"), as well as the Contractor undertakes to provide theoretical and practical training concerning use of the Goods (hereinafter referred to as the "Training") for at least 10 (ten) employees of the Contracting Authority, and to provide warranty of \_\_\_\_\_\_\_) months (not less than 36 (thirty-six) months) for the Goods after mutual signing of the Transfer-Acceptance Report of the Goods according to the provisions of Annex No. 1 "Technical Specification" to the Contract (hereinafter referred to as Annex No. 1 to the Contract), Annex No. 2 "Technical Proposal" to the Contract, requirements of laws and regulations and the Contracting Authority's instructions regarding the costs indicated in Annex No. 3 "Financial Proposal" to the Contract (hereinafter referred to as Annex No. 3 to the Contract).
- 1.2. The Contracting Authority shall make payment for the Goods delivered and installed in timely manner, good quality and in accordance with the Contract, laws and regulations and the Contracting Authority's instructions, and Training according to the provisions of the Contract.

## 2. CONTRACTUAL AMOUNT AND PAYMENT PROCEDURE

2.1. In accordance with Annex No. 3 to the Contract, the Contractual Amount for the Goods, their delivery, installation and Training is EUR \_\_\_\_\_\_ (\_\_\_\_\_\_ euro, \_\_\_\_\_ cents) excluding value added tax (hereinafter referred to as – VAT) and VAT \_\_% EUR \_\_\_\_\_\_ (\_\_\_\_\_\_ euro, \_\_\_\_\_ cents), thus the total Contractual Amount including VAT is EUR \_\_\_\_\_\_ (\_\_\_\_\_\_\_ euro, \_\_\_\_\_\_ cents).

- 2.2. The prices and Contractual Amounts set out in Clause 2.1 of and Annex No. 3 to the Contract shall include all the costs related to the delivery of the Goods and the provision of Training, as well as all the state and local taxes, duties and other payments.
- 2.4. The Contracting Authority shall make residual payment of \_\_\_\_\_\_% (\_\_\_\_\_ percent) of the amount payable for the Goods, delivery and installation thereof and the training according to Clause 2.1 of the Contract being EUR \_\_\_\_\_\_(\_\_\_\_\_euro, \_\_\_\_\_\_cents) excluding VAT, and VAT \_\_\_\_\_% EUR \_\_\_\_\_\_(\_\_\_\_\_euro, \_\_\_\_\_\_cents), making a total of EUR \_\_\_\_\_\_\_( euro, \_\_\_\_\_\_cents) including VAT, within 7 (seven)

business days of receipt of the invoice drawn up by the Contractor by transferring the funds to the current account specified in the Contractor's invoice and held with a credit institution. The Contractor shall prepare an invoice only after mutual signing of the Transfer-Acceptance Report of the Goods and the Training in accordance with the provisions of Clause 3.10 of the Contract.

- 2.5. The Contracting Authority shall be entitled to reduce the payment set out in Clause 2.4 of the Contract, if the Parties have agreed on a reduction of the payment amount in accordance with Clause 3.5 of the Contract.
- 2.6. The Contractor shall refund the advance payment received from the Contracting Authority according to Clause 2.3 of the Contract within 3 (three) business days, if the Contract is terminated in accordance with Clauses 10.4 or 10.5 of the Contract.
- 2.7. The Parties agree that all the invoices are drawn up electronically and are valid without a signature, and the Contractor shall send the invoice to the Contracting Authority's e-mail address gramatvediba@vases.lv. The invoice shall be deemed to have been notified on the next business day following the day of sending.
- 2.8. VAT is applied in accordance with the procedure established by the laws and regulations of the Republic of Latvia. If, during the term of the Contract, the VAT rate changes in accordance with the laws and regulations of the Republic of Latvia, the Parties agree to apply the current VAT rate to the amounts set out in the Contract excluding VAT without any additional agreement, thus changing the total amount of the Contract including VAT.
- 2.9. Payments shall be deemed to have been made on the day on which the Contracting Authority has transferred the money to the current account specified in the Contractor's invoice, as confirmed by a relevant payment order approved by a bank.

# 3. TRAINING, DELIVERY OF THE GOODS, TRANSFER AND ACCEPTANCE PROCEDURE

- 3.1. Delivery and installation of the Goods (including inspections in accordance with the requirements set out in Annex No. 1 to Contract, Part 4.4, Clause 74) shall be carried out within \_\_\_\_\_\_(\_\_\_\_\_) months (not exceeding 6 (six) months) from the day of mutual signing of the Contract in accordance with the provisions of the Contract, Annexes No. 1 and 2 to the Contract, as well as in accordance with the requirements of laws and regulations and the Contracting Authority's instructions at the following Contracting Authority's addresses:
  - 3.1.1. 171 Slokas street, Riga;
  - 3.1.2. 87 Strādnieku street, Daugavpils;
  - 3.1.3. 4 Kr. Valdemāra street, Rēzekne;
  - 3.1.4. 7 Gaujas street, Valmiera;

## 3.1.5. 77 Inženieru street, Ventspils,

- 3.2. The Contracting Authority shall provide the Training prior to delivery of the Goods at a time and place agreed by the authorised representatives of the Parties referred to in Clause 12.1 of the Contract. If the training takes place outside the territory of the Republic of Latvia, the Contractor shall, at its own expense, cover the expenses of the Contracting Authority's employees for the period of official travel as set out in the Cabinet Regulation No. 969 of 12 October 2010 "Procedures for Reimbursement of Expenses Relating to Official Travels".
- 3.3. The Contractor shall, not later than within 5 (five) business days after delivery and installation of the Goods, draw up and submit to the Contracting Authority's authorised representative referred to in Clause 12.1.1 of the Contract a Transfer-Acceptance Report concerning the delivery and installation of the Goods and Training containing information on performance of the delivery and installation of the Goods (including conducting of inspections according to the requirements set in Annex No. 1 to Contract, Part 4.4, Clause 74) and provision of the Training in accordance with the conditions of the Contract and the Contracting Authority's instructions.
- 3.4. The Contracting Authority shall inspect the Goods and sign the Transfer-Acceptance Report of the Goods not later than within 5 (five) business days after receipt of the Report or submit a written claim to the Contractor. If the Contracting Authority has not submitted a claim within 5 (five) business days from the date of receipt of the Transfer-Acceptance Report of the Goods and the Training, delivery of the Goods shall be deemed to have been completed.
- 3.5. The Contracting Authority shall be entitled to refuse to sign the Transfer-Acceptance Report of the Goods and the Training, if the Contracting Authority has any objections to the Goods and/or the Training in accordance with the Contract, laws and regulations, and/or the Contracting Authority's instructions by writing its objections therein. In such a case, the Parties shall agree on a time limit for the elimination of the non-conformities, which shall not exceed 10 (ten) calendar days, and procedures for the elimination of the non-conformities, and/or reduction of the payment. If the Contractor does not agree with the non-conformities specified in the Contracting Authority's claim, the Contracting Authority shall have the right to engage an independent expert to establish the non-conformities, whose decision shall be binding on the Parties. The services of the expert shall be paid for by the Party that has committed the mistake within the dispute. If both Parties are at fault within the dispute, the Parties shall pay for the services of the expert in equal instalments.
- 3.6. The Goods shall be deemed to have been delivered and installed, and the Training shall be deemed to have been provided, if the Goods are delivered and installed (including the performance of inspections in accordance with the requirements set out in Annex No. 1 to the Contract, Part 4.4, Clause 74) and the Training has been provided in accordance with the requirements of the Contract and the laws and regulations, as well as the Contracting Authority's instructions, and if the Transfer-Acceptance Report of the Goods and the Training has been signed by the authorised representatives of the Parties set out in Clause 12.1 of the Contract, or after expiry of the period referred to in Clause 3.4 of the Contract.
- 3.7. In the event that, after the signing of the Transfer-Acceptance Report of the Goods and the Training, the Contracting Authority finds that the Goods and/or their installation do not comply with the Contract, laws and regulations, and/or the Contracting Authority's instructions, the Parties shall draw up a mutually signed report to that effect, and the Contractor shall eliminate the found non-compliances within 30 (ten) calendar days at its own expense. If the Contractor refuses to sign the non-conformity report, the Contracting Authority shall engage an independent expert to establish the non-conformities, whose decision shall be binding on the Parties. The services of the expert shall be paid for by the Party that has committed the mistake within the dispute. If both Parties are at fault within the dispute, the Parties shall pay for the expert's services in equal instalments.
- 3.8. In the event that the expert engaged in accordance with the procedure set out in Clause 3.5 and/or 3.7 of the Contract finds that the Contractor has failed to comply with the provisions of the Contract or that the Goods and/or installation, and/or the Training do not comply with the

conditions of the Contract, laws and regulations, and/or the Contracting Authority's instructions, the Contractor shall be obliged to eliminate the non-conformities identified in the expert's report within the time limit set by the expert.

- 3.9. If the Contractor fails to eliminate the non-conformities identified in the expert's report within the time limit specified in Clause 3.8 of the Contract, the Contracting Authority shall be entitled to unilaterally terminate the Contract, and the Contractor shall be obliged to compensate the Contracting Authority for any damages. The Contract shall be deemed to have been terminated upon notification by the Contracting Authority to the Contractor of termination of the Contract. If the notification is sent by a registered post, it shall be deemed to have been notified on the 7th (seventh) day after it is posted, but if sent by electronic means, it shall be deemed to have been notified on the 2nd (second) business day following its dispatch.
- 3.10. Upon mutual signing of the Transfer-Acceptance Report of the Goods and the Training by the authorised representatives of the Parties set out in Clause 12.1 of the Contract or upon expiry of the period referred to in Clause 3.4 of the Contract, the Contractor shall prepare an invoice for the payment set out in Clause 2.4 of the Contract.

## 4. PROVISION OF WARRANTY

- 4.2. During the warranty period, the Contractor shall replace the defective Goods and/or eliminate any installation deficiencies within the maximum period of 30 (thirty) calendar days from the date of receipt of the Contracting Authority's request.
- 4.3. During the warranty period, the Contractor shall maintain the software in accordance with the requirements set out in Annex No. 1 to the Contract.
- 4.4. During the warranty period, the Contractor undertakes to provide repair works of the delivered Goods only at the service centre authorised by the manufacturer of the Goods at the Contractor's service centre(s)

#### 5. OBLIGATIONS AND DUTIES OF THE PARTIES

- 5.1. The Contractor:
  - 5.1.1. undertakes to deliver and install the Goods in a high quality, in timely manner and in accordance with the provisions of the Contract, requirements of the laws and regulations and the Contracting Authority's instructions, to provide warranty for the Goods, as well as the Training;
  - 5.1.2. agrees to provide the Contracting Authority with the Transfer-Acceptance Report of the Goods and the Training within 5 (five) business days of delivery and installation of the Goods;
  - 5.1.3. undertakes to prepare and submit to the Contracting Authority, together with the Transfer-Acceptance Report of the Goods and the Training, information about the Goods or documents necessary for provision of the warranty;
  - 5.1.4. undertakes to deal with any claims made by the Contracting Authority regarding noncompliance of the Goods and/or installation, and/or Training with the quality requirements, the Contract, laws and regulations, and/or the Contracting Authority's instructions;
  - 5.1.5. shall be entitled to receive payment from the Contracting Authority for the Goods delivered and installed in good quality, in timely manner and in accordance with the provisions of the Contract, requirements of laws and regulations, and the Contracting

Authority's instructions and for the Training provided in accordance with the provisions of the Contract;

- 5.1.6. shall be entitled to obtain from the Contracting Authority the information which is at its disposal and necessary for the performance of the Contract within the maximum period of 5 (five) business days from the date of the request for information;
- 5.1.7. undertakes to provide the Contracting Authority with information on the performance of the Contract, to make recommendations where necessary, and to report on the progress of the Contract at the request of the Contracting Authority;
- 5.1.8. certifies that the Contractor, member of its board and/or council, true beneficial owner, person entitled to represent and/or procurator are not subject to international or national sanctions or to sanctions imposed by a Member State of the European Union or North Atlantic Treaty Organisation that affect significant financial and capital market interests and that it does not conform to the provisions of Article (5)(k)(1) of the Regulation (EU) No. 833/2014 of the European Parliament and of the Council of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine and undertake to inform the Contracting Authority immediately of any changes to the given declaration.
- 5.2. The Contracting Authority:
  - 5.2.1. undertakes to pay for the Goods delivered and installed in good quality, in timely manner, in accordance with the provisions of the Contract, requirements of the laws and regulations, and provided Training;
  - 5.2.2. undertakes to provide the Contractor with the information necessary for the performance of the Contract within the period not exceeding 5 (five) business days from the date of receipt of the request;
  - 5.2.3. shall be entitled to submit to the Contractor a written claim with objections concerning the Goods, their delivery and/or installation, and/or the Training in accordance with the Contract, laws and regulations, and/or the Contracting Authority's instructions;
  - 5.2.4. shall be entitled not to accept the Goods and/or the Training, if non-compliance with the provisions of the Contract, laws and regulations, and/or the Contracting Authority's instructions is found. In the event of non-conformities, the Contracting Authority shall proceed as set out in Clauses 3.5 and 3.7 of the Contract;
  - 5.2.5. shall be entitled not to pay the Contractor's invoice for the Goods or Training, for which the Contracting Authority has submitted a written claim in accordance with the procedures set out in the Contract.

## 6. LIABILITY AND PENALTIES

- 6.1. In accordance with the laws and regulations of the Republic of Latvia, a Party shall be liable for damages caused to the other Party, if such damages are caused by act or omission of the Party, including its employees, authorised persons, third parties involved in the performance of the Contract, in breach of their obligations under the Contract. The Party at fault shall, within 1 (one) month of the date of establishment of the relevant damage, compensate the other Party for the losses, whereof an expert's report or damage report has been drawn up.
- 6.2. If the Contractor has missed the deadline for delivery and installation of the Goods set out in Clause 3.1 of the Contract or has failed to eliminate the deficiencies specified in the Transfer-Acceptance Report of the Goods and the Training, the Contracting Authority's claims or in the non-conformity report within the specified time limit, the Contracting Authority shall be entitled to demand, and the Contractor shall be obliged to pay contractual penalty in the amount of 0.1% (one tenth of one percent) of the Contractual Amount stipulated in Clause 2.1 of the Contract for the Goods, their delivery and the Training for each day of delay, but not exceeding 10% (ten percent) of the amount specified in Clause 2.1 of the Goods, their delivery and

the Training. The Contracting Authority shall be entitled to withhold contractual penalty from payments due to the Contractor upon a prior written notice to the Contractor.

- 6.3. For late payment for the delivered and installed Goods and/or the Training, the Contractor shall be entitled to demand, and the Contracting Authority shall be obliged to pay contractual penalty in the amount of 0.1% (one tenth of one percent) of the outstanding amount for each day of delay, but not exceeding 10% (ten percent) of the outstanding amount.
- 6.4. If the Contractor refuses to perform the Contract, it shall pay to the Contracting Authority contractual penalty in the amount of 10% (ten percent) of the amount set out in Clause 2.1 of the Contract for the Goods, their delivery and the Training. Within the context of this Clause, refusal to perform the Contract shall mean that the Contractor fails to deliver the Goods within 30 (thirty) calendar days of the due date set out in Clause 3.1 of the Contract.
- 6.5. The Contracting Authority shall be entitled to reduce, by way of set-off, the amount payable for the Goods and their installation and the Training to the extent of the amount of contractual penalty calculated in accordance with the Contract and the amount of any loss caused to the Contracting Authority in the course of performance of the Contract.
- 6.6. If the contractual penalty calculated in accordance with the Contract cannot be set off or is not set off, the Contractor shall be obliged to pay it within 15 (fifteen) calendar days from the date of receipt of a written request and invoice from the Contracting Authority.
- 6.7. Payment of the contractual penalty shall not release the Parties of their other obligations under the Contract and the obligation to compensate for damages.

## 7. FORCE MAJEURE

- 7.1. A Party shall not be liable for any failure to perform any of its obligations if such failure has resulted from an unavoidable event with insurmountable consequences, and which could not have been foreseen by the Party at the time of entering into the Contract, and which has not occurred due to the act of the Party or a person under its control, and which makes performance not only difficult but also impossible.
- 7.2. The Party experiencing such force majeure circumstances shall be obliged to notify the other Party in writing no later than within 10 (ten) business days after the occurrence of the force majeure circumstances. A document issued by a competent authority confirming the occurrence of force majeure circumstances shall be submitted at the request of the other Party. If a Party has failed to notify the occurrence of force majeure in the manner provided for in the Contract, it may not subsequently refer to force majeure.
- 7.3. In the event of force majeure, performance of obligations shall be extended for the period of duration of the force majeure circumstances.
- 7.4. If, due to force majeure, the obligations assumed by the Contract cannot be performed for more than 30 (thirty) calendar days, each Party shall be entitled to unilaterally withdraw from performance of the Contract, and neither Party shall be entitled to claim for damages.

## 8. RESTRICTED INFORMATION

- 8.1. The Parties undertake not to disclose to third parties any data obtained during the performance of the Contract, the processing of which is restricted in accordance with the procedure laid down by the laws and regulations.
- 8.2. The Parties undertake not to disclose to third parties any technical, legal and financial information concerning the other Party and its business activities which they have acquired in connection with the performance of the Contract. All such information shall be considered restricted information, and it shall not be disclosed or made public without a written consent of the Party. This provision is not time-limited and subject to the duration of the Contract.
- 8.3. Information shall not be considered restricted information if it has become public in accordance with the requirements laid down in the laws and regulations (e.g., included in public accounts and reports prepared by accountants, etc.).

8.4. The non-disclosure rules do not apply also in cases where the relevant information is classified as generally available information by laws and regulations, as well as where such information is requested by competent authorities or organisations defined by laws and regulations with a legitimate right to it.

## 9. DATA PROTECTION

- 9.1. A Party shall have the right to process personal data obtained from the other Party only for the purpose of ensuring the performance of its obligations under the Contract, in compliance with the requirements stipulated in the laws and regulations for the processing and protection of such data, including the requirements of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation).
- 9.2. The Party that transfers personal data to the other Party for processing shall be responsible for obtaining the consents of the data subjects concerned, where consent for such personal data processing is necessary. Each Party shall be individually responsible for complying with its obligation to inform data subjects, as well as for complying separately with any other obligations imposed on the data controller by the General Data Protection Regulation.
- 9.3. The Parties undertake not to pass on to third parties any personal data obtained from the other Party, except as the Contract stipulates otherwise or laws and regulations provide for transfer of such data.
- 9.4. Where the Parties under the laws and regulations may be obliged to transfer personal data obtained from the other Party to third parties, the respective Party shall be obliged to inform the other Party thereon prior to such a transfer.
- 9.5. Either Party shall be entitled to immediately suspend further transfer of personal data if the other Party fails to ensure compliance with the data processing requirements imposed thereon by the Contract or any applicable laws and regulations. In this case, the Party that establishes the breach shall be entitled to demand return of the data transferred to the other Party and subsequent deletion of the data from the other Party's systems.
- 9.6. The Parties undertake, at the request of the other Party, to destroy the personal data obtained from the other Party if the need to process them for the purpose of performance of this Contract ceases and if there is no other basis for processing the personal data.

# 10. VALIDITY OF THE CONTRACT AND AMENDMENT PROCEDURES

- 10.1. The Contract shall enter into effect on the date of its mutual signing (date specified in the preamble of the Contract) and remain effective until the obligations of the Parties have been performed in full.
- 10.2. Any changes to the provisions of the Contract shall become effective only when drawn up in writing and signed by both Parties. Such amendments to the Contract shall become an integral part thereof upon signing thereof.
- 10.3. During the validity period of the Contract, the Contract may be cancelled or terminated prior to performance of the obligations by mutual written agreement of the Parties, in the cases stipulated in the laws and regulations of Latvia, as well as in the cases stipulated in this Contract, and each Party shall have the right to unilaterally withdraw from performance of the obligations under the Contract without the consent of the other Party by terminating the Contract prior to performance of the obligations.
- 10.4. The Contracting Authority shall have the right to withdraw unilaterally from the Contract without compensation for damages, contractual penalties and other expenses that may arise from the exercise of this right, by giving the Contractor at least 10 (ten) calendar days' prior written notice, if:

- 10.4.1. The Contractor has either delayed the delivery and installation of the Goods by more than 10 (ten) business days or has delivered and/or installed the Goods, and/or provided the Training without complying with the procedures or scope of the Contract;
- 10.4.2. Amount of the contractual penalty calculated for the Contractor in accordance with the procedure set out in the Contract has reached the maximum amount, i.e., 10% (ten percent) of the Contractual Amount specified in Clause 2.1 of the Contract for the Goods, their delivery and the Training;
- 10.4.3. The Goods delivered and installed and/or the Training provided by the Contractor are of poor quality (i.e., the result is not achieved to the same level as any other professional or set of professionals with equivalent qualifications could achieve it);
- 10.4.4. the event specified in Clause 7.4 of the Contract has occurred;
- 10.4.5. The Contractor has been declared insolvency proceedings, has its business activities suspended or is being wound up;
- 10.4.6. the event referred to in Section 11<sup>1</sup>, Paragraph Five of the Law on International Sanctions and National Sanctions of the Republic of Latvia has been established or the Contractor, member of its board and/or council, true beneficial owner, person entitled to represent and/or procurator conform to the provisions of Article (5)(k)(1) of the Regulation (EU) No. 833/2014 of the European Parliament and of the Council of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine.
- 10.5. The Contractor shall have the right to withdraw from the Contract unilaterally, without compensating the damages, contractual penalties or other expenses that may arise from the exercise of this right, by giving at least 10 (ten) calendar days' prior written notice to the Contracting Authority, if:
  - 10.5.1. The Contracting Authority has not provided information, materials, etc., or the Contracting Authority has failed to take any actions necessary for the delivery, installation of the Goods, or provision of the Training, or the Contracting Authority has committed a material delay of the aforementioned, which prevents the Contractor from delivering and installing the Goods and/or providing the Training as required by the Contract;
  - 10.5.2. The Contracting Authority has delayed payment, where the delay exceeds 10 (ten) business days;
  - 10.5.3. the event specified in Clause 7.4 of the Contract has occurred;
  - 10.5.4. The Contracting Authority has been declared insolvency proceedings, its business activities have been suspended, or it is being wound up.
- 10.6. Where a Party has exercised its rights to unilaterally withdraw from the Contract in accordance with the Contract, the Contract shall be deemed to have been terminated on the day on which the notice period has expired. This shall not apply to payment obligation where the payment obligations have arisen prior to the date of termination of the Contract, as well as other payment obligations, actions and restitution obligations, where provided for in the event of termination of the Contract, as well as warranties, confidentiality, dispute resolution obtained in accordance with the procedure stipulated in the Contract, applicable laws and regulations, and other provisions of the Contract where the regulation of the Contract remains effective until full performance.

# 11. SUBCONTRACTING AND REPLACEMENT OF SUBCONTRACTORS

(In case of subcontracting, this section will be clarified in view of the provisions of Clauses 57 –61 of the Regulation of the open competition "Purchase of Radio Frequency Direction Finding Systems", identification No. VASES 2022/12, and of the Tenderer's proposal).

## **12. FINAL PROVISIONS**

- 12.1. The following authorised representatives of the Parties will deal with matters related to the performance of the Contract:
  - 12.1.1. Authorised representative of the Contracting Authority \_\_\_\_\_, phone +371
  - \_\_\_\_\_\_; e-mail: \_\_\_\_\_\_; 12.1.2. Authorised representative of the Contractor \_\_\_\_\_\_-, phone
- 12.2. Authorised representatives of the Parties shall:
  - 12.2.1. contact the other Party on matters related to the performance of the Contract;
  - 12.2.2. coordinate quality performance of the Contract;

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- 12.2.3. deal with other organisational matters related to the performance of the Contract;
- 12.2.4. exercise the functions of authorised representatives of the Parties as set out in the Contract;
- 12.2.5. sign the reports resulting from the performance of the obligations under the Contract.
- 12.3. Neither Party may assign the performance of its obligations under the Contract to a third party without a written consent of the other Party.
- 12.4. The Contract shall be binding on the legal successor of each Party.
- 12.5. If any of the provisions of the Contract become invalid or unenforceable, in whole or in part, in accordance with the laws and regulations applicable in Latvia, this shall not affect and cancel the validity and legality of the remaining provisions of the Contract, but the provisions of the Contract which become invalid or unenforceable must be replaced by other provisions consistent with the purposes of the Contract in accordance with the requirements set forth in the relevant laws and regulations.
- 12.6. Matters not governed by the Contract shall be negotiated in accordance with the laws and regulations of Latvia.
- 12.7. Failure to exercise any rights under the Contract shall not affect such rights and shall not constitute a waiver of such rights by a Party, nor shall the partial exercise of such rights preclude a Party from continuing to exercise it.
- 12.8. Any disagreements, differences or disputes shall be resolved by mutual negotiation. If the Parties are unable to reach an agreement within 30 (thirty) calendar days, the dispute shall be resolved in accordance with the laws and regulations of Latvia accordance to the procedures set forth therein in the court of the Republic of Latvia.
- 12.9. The Parties shall use the e-mail address specified in the Contract for the exchange of information and documents. Information and documents sent to the other Party at the e-mail address specified in the Contract shall be deemed to have been received and shall be binding on the other Party. This provision shall not apply to information and documents the procedure of whose submission/sending is specifically provided for in other provisions of the Contract. If the document is sent by a registered post, it is deemed to have been received on the 7th (seventh) day after it is posted, but if sent by electronic means, it shall be deemed to have been notified on the 2nd (second) business day following its dispatch.
- 12.10. The Parties shall notify each other in writing within 5 (five) business days of any change in their legal status, address (actual or legal), means of communication, contact persons or payment details as specified in Clause 12.1 of the Contract. Otherwise, the Party which has failed to notify may not refer to the default caused by the failure to notify.
- 12.11. The Contract has been drawn up in electronic form in Latvian, on \_\_\_\_\_ (\_\_\_\_) pages, of which \_\_\_\_\_ (\_\_\_\_) pages contain the main body of the Contract, \_\_\_\_\_ (\_\_\_\_) pages contain Annex No. 1 "Technical Specification" to the Contract, \_\_\_\_\_ (\_\_\_\_) pages contain Annex No. 2 "Technical Proposal" to the Contract, but \_\_\_\_\_ (\_\_\_\_) page contain Annex No. 3 "Financial Proposal" to the Contract, and both Parties have signed it with a secure electronic signature. The date of mutual signing of the Contract shall be the date and time of the time stamp of the secure electronic signature affixed by the last signatory.

## **13. LEGAL ADDRESSES AND DETAILS OF THE PARTIES**

On behalf of the CONTRACTING AUTHORITY	On behalf of the CONTRACTOR	
State Joint-Stock Company "Electronic		
Communication Office"		
Unified registration No. 40003021907	Unified registration No.	
VAT No. LV 40003021907	VAT No.	
5 Eksporta street, Riga, LV-1010	Address:	
e-mail: vases@vases.lv	e-mail:	
Phone. 67333034	Phone:	
Bank: JSC (AS) "Citadele banka"	Bank:	
Account: LV14PARX0000231601015	Account:	
Bank code PARXLV22	Bank code:	

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\* THE DOCUMENT IS SIGNED ELECTRONICALLY WITH A SECURE ELECTRONIC SIGNATURE AND CONTAINS A TIME STAMP