

**Annex II to the Invitation to Tender**

**Frontex/OP/221/2019/RS**

# **Terms of Reference**

**Framework Contract for the supply of Heart Beat  
Detectors (HBD) for border checks**

---

## 1. Acronyms

---

Acronym	Definition
CM	Contract Manager
DDP	Delivery Duty Paid (incoterms)
EU	European Union
FCM	Frontex Contract Manager
FWC	Framework Contract
HBD	Heart Beat Detector
MS	A Member State of the European Union
MTR	Minimal technical requirements
SAC	Schengen Associated Country
SO/SOs	Specific Order/Specific Orders
ToR	Terms of Reference
TS	Tender Specifications

---

## 2. Introduction to Frontex

---

The European Border and Coast Guard Agency - Frontex (hereinafter referred to as “Frontex”) was established by the Council Regulation (EC) Regulation (EU) 2016/1624 with a view to improve the integrated management of the external borders of the Member States of the European Union.

In pursuit of this goal, Frontex plans, coordinates, implements and evaluates joint operations conducted using Member States’ staff and equipment at the external borders of European Union.

The Regulation (EU) 1624/2016 laid down in Article 8 that the Agency shall contribute to an efficient, high and uniform level of border control and return including by setting up a technical equipment pool to be deployed in joint operations, rapid border interventions and in the framework of migration management support teams, as well as in return operations and return interventions.

In addition, the Article 39 defines the composition of the technical equipment pool into equipment owned either by the Member States or by the Agency and equipment co-owned by the Member States and by the Agency for its operational activities. In the same time, the Article 38 of the abovementioned EU Regulation provisions, ensures the legal basis for Frontex to develop its own operational capacity by acquiring itself or in co-ownership with a Member State or to lease technical equipment for external border control in accordance with the financial rules applicable to the Agency.

Further information about Frontex origin, organisation, its mandate, fields of activities, strategy and planned activities can be read on the Agency’s web site: [www.frontex.europa.eu](http://www.frontex.europa.eu).

---

## 3. General Information

---

### 3.1. Aim of the document

This document defines terms and conditions to procure Heart Beat Detectors for border checks. It describes the minimum requirements for the requested devices and it ensures that the offered and then delivered goods comply with Frontex requirements.

These terms of reference shall become an integral part of the contract that may be awarded as a result of this open tender procedure.

All the information delivered in this document, its annexes and other referred documents shall be taken into consideration by the Tenderers in preparation of the offer and by the Contractor during the contract's implementation.

### **3.2. Target Situation**

In order to achieve the optimal technical equipment availability Frontex intends to establish a FWC for purchasing Heart Beat Detectors to be used for border check purposes. The overall maximum duration of the FWC shall be limited to four (4) years.

The quantity of equipment to be ordered during the lifetime of the contract is estimated to be as follows:

Table 1.

	quantity
1 <sup>st</sup> year:	5
2 <sup>nd</sup> year:	5
3 <sup>rd</sup> year:	5
4 <sup>th</sup> year:	5

The forecast presented in the table above is indicative and cannot be considered as automatically constituting any form of commitment by Frontex.

---

## **4. Scope of the FWC**

---

The objective of the framework contract is to provide Frontex with the capacity to obtain different quantities of Heart Beat Detectors, each time the need arises, according to its terms and conditions.

---

## **5. Minimal Technical requirements - Heart Beat Detectors (HBD)**

---

### **5.1. Basic description**

The heartbeat detector needs to enable precise detection of human beings hidden in stationary vehicles (regardless their tonnage) under border crossing conditions where constant frequency of vehicles is present (vibrations of the base due to vehicles crossing) which will not affect the operation and the accuracy of the results produced by the heartbeat detector.

Heartbeat detector kit (system) shall contain:

- Ruggedized laptop (resistant to mechanical shocks), with pre-installed specialized applications (software for heartbeat detection) with colour touch screen, size diagonally minimum 12" (inches);
- Laptop carrying case and rechargeable cable;
- System sensors (protected to environmental factors - frost, rain, hail etc.) and related accessories for mounting on metallic or plastic elements of the vehicle;
- Related cables, 2 USB connectors and suitable connectors for 4 sensors (including sensor control module, if necessary) as well as a possibility to connect keyboard and mouse;
- Rechargeable accumulators device;

- System carrying case, with partitioned housing for storing and transporting system components. The carrying case shall be impact and humidity resistant and large enough to store the heartbeat kit and all of its components;
- Complete documentation and manual for use, media and print, in English as a minimum.
- 4 vibration (seismic) sensors and 2 additional spare sensors:
  - Minimum IP 54 protection
  - Waterproof electric connectors (minimum IP 54 for water protection)
  - Sensor - computer connecting cables that are suitable for the outside work. Minimum 15 m length.

#### **5.1.1. Performance requirements**

The system shall comply with the following characteristics and be:

- portable and must be constructed of robust materials so that it tolerates transport and use in different environments;
- able to detect whether there are persons hiding in vehicles by registering heartbeats;
- suitable for both indoors and outdoors use;

#### **5.1.2. Functional requirements**

- designed in a way to allow a quick installation (installation time max. 20 minutes);
- after the system is switched on, it shall enable the heartbeat detection within a period not longer than two (2) minutes;
- capable to operate connected to a to the standard 220/230V F socket, 12V car jack or accumulators;
- capable to indicate the sensor/sensors that generated a positive detection result;
- easy to maintain with a view to replacing sensors and similar items.

#### **5.1.3. Detailed technical requirements**

- the false alarms rate (closed space) shall be maximum 10%;
- the false alarms rate related to the negative result of the detection - maximum 2%;
- The system shall allow register of events to be kept for all vehicles that have been scanned, their subsequent consultation, and backups;
- The system should have a drum for winding of the cables when not in use;
- The system software shall have an intuitive graphic interface, in English as minimum, with quick access by mouse and keyboard.

The Contractor should agree on free updating of the system software during the warranty period.

#### **5.1.4. Environmental requirements**

- capable of operating in temperatures ranges between -25 to +35 degrees and be moisture resistant;

#### **QUALITY ASSURANCE OF THE PRODUCT:**

According to ISO 9001:2015 international standards.

---

## **6. Delivery, training, warranty and maintenance**

---

### **6.1. Delivery**

The Contractor will be responsible for the timely delivery of requested products. The Contractor will also be responsible to address customs and all import related issues if any.

The ordered batches of equipment shall be delivered the soonest possible but not later than 2 months after the specific order signature.

The equipment shall be transported (DDP) and delivered to Frontex Headquarters together with all corresponding documentation and, where applicable, certificates.

The delivery address is:

Frontex  
Plac Europejski 6,  
00-844 Warsaw - Poland

The delivery shall take place during working hours (Monday - Friday 09:00-17:00 excluding holidays). The contractor and Frontex shall agree on exact date and time of delivery at least within 1 week before the actual delivery takes place.

### **6.2. Training**

#### **6.2.1. Training Manuals**

The contractor shall provide detailed technical and training manuals which shall be available (both in paper and electronic form) at least in the following languages: English, German, French, Spanish, Italian and Greek.

#### **6.2.2. Hands-on training**

The Contractor may also be asked to provide the necessary hands-on training to the staff identified by Frontex on the handling of the purchased equipment. Frontex reserves the right to request such training either together with the delivery of the equipment or at any other moment during the contract duration.

The training location shall be at Frontex HQ premises in Warsaw. The costs of Frontex staff participation will be covered by Frontex. The training shall be carried out in English language. All training related documents (manuals, presentations, etc.) shall be in electronic and paper format in English language, one copy for each participant.

The training shall be subject to a Specific Order. Therefore the financial proposal shall outline the cost of a 1 day training delivery, all contractor costs included.

### **6.3. Warranty and maintenance**

The purchased equipment shall be covered by at least 2 years warranty.

The warranty shall include all required regular maintenance services, including the re-filling/re-furbishing of disposables if required.

---

## **7. Quality monitoring and acceptance procedures**

---

### **7.1. Quality control procedure**

Frontex will monitor the quality of the products provided by the Contractor. Elements that will be monitored include:

- Compliance of the product to the Minimum Technical Requirements as described in art. 5 of this ToR;
- Speed and agility of responding to requests and adherence to deadlines;
- Communication skills and ability to cooperate with users.

The Contractor will be immediately informed in case the quality is not up to expectations in any of the criteria and will be requested to remedy to the identified failure immediately.

In addition, Frontex reserves the right to contract an independent testing, including in the field conditions, on any of the delivered equipment at any moment during the contract duration for the purpose of verification of quality of the equipment and its compliance to the MTR described in art 5 of this ToR. Such tests shall be executed by an independent internationally recognised European organisation.

### **7.2. Acceptance procedure**

Based on quality monitoring and control, all products delivered under the FWC will be subject to the Frontex acceptance.

Upon delivery of the products which are part of the SCs Frontex shall within 30 calendar days to evaluate them and provide the Contractor with written notice of Acceptance, Partial Acceptance or Non-acceptance.

In the event Frontex provided notice of partial or non-acceptance to Contractor, it shall have the continuing right, at its sole discretion, to:

- refuse to pay any fees or other amounts associated with such products;
- accept such products on the condition that any fees or other amounts payable with respect thereto shall be reduced or discounted to reflect, to Frontex' satisfaction, the deficiencies present therein or the costs likely to be incurred by Frontex to correct such deficiencies; or
- terminate the contract and/or seek any and all available remedies, including damages.

---

## **8. Implementation of FWC**

---

### **8.1. Indicative implementation plan for the FWC**

The list below presents the indicative plan of the implementation of the FWC, which is not binding on Frontex and may be adapted during the contractual period.

- First SC is scheduled to start in 2020;
- Estimated number of SCs per year - 1;

### **8.2. Specific Orders implementation process**

The FWC shall be implemented by means of specific orders (see the draft contract in Annex V).

### **8.3. Payment**

All prices shall be in Euro, excluding VAT.

Pre-payment:

- Upon signature of the specific order, the contractor may issue a pro-forma invoice for an advance payment corresponding to 30% of its overall value. Frontex shall pay the pro-forma invoice within 30 days after its receipt;

Final payment:

- After acceptance of all products delivered and upon reception of the final invoice, Frontex will execute the final payment within 30 days.

### **8.4. Language**

All the documentation delivered within the contract shall be in English. Moreover all communication, whether written or spoken, shall be in English.

### **8.5. Contract management personnel**

#### **8.5.1. Contractor's personnel**

The Contractor shall be responsible for providing all necessary personnel to ensure the satisfactory performance of its obligations under the FWC and shall supervise and be fully responsible and liable for all the services performed by its personnel and for their compliance with the terms and conditions of the FWC.

During the implementation of the FWC and its SCs the Contractor shall nominate a Contract Manager (CM) for all contractual matters. CM will act as a single contractual contact point. All the correspondence related to the FWC (including the implementation of the SCs) will be addressed to him.

#### **8.5.2. Frontex personnel**

For the proper implementation of the FWC and its SCs Frontex will nominate a Frontex Contract Manager (FCM), who will act as a single contact point for all the matters related to the FWC implementation, including the implementation of the SCs.