

# **Terms of Reference**

## **Coastal Surveillance Aerostats**

### **-Deployment & Trial**

**Frontex/OP/1048/2017/JL**



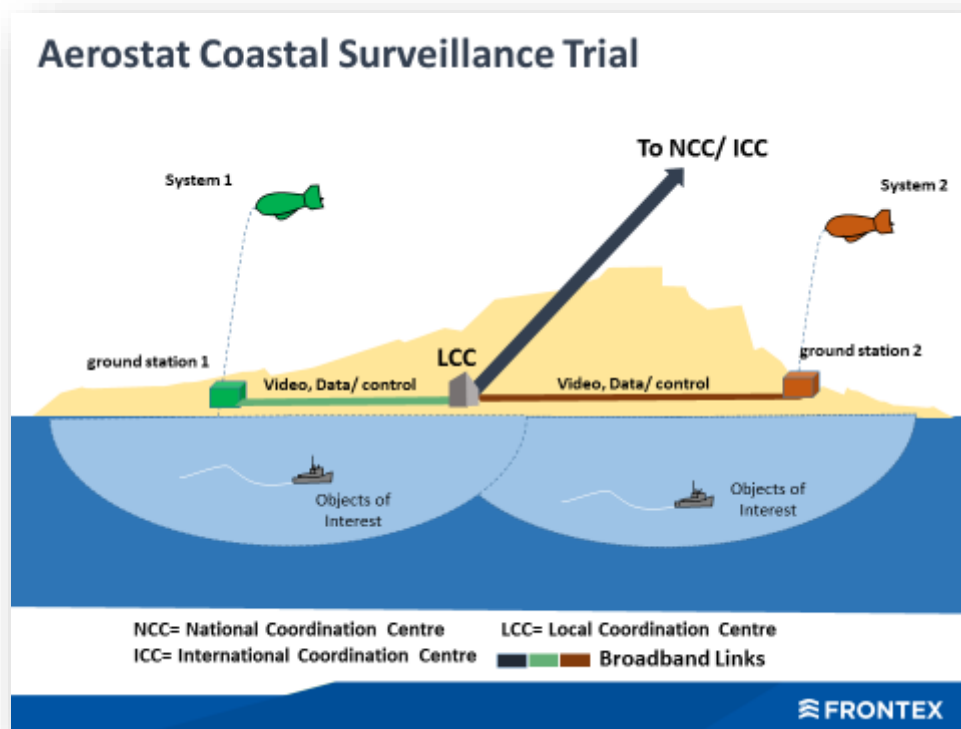
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## 1. Background and context

The Border and Coast Guard Agency, Frontex, new Regulation<sup>1</sup>, establishes that the Agency may acquire or lease technical equipment for external border control to be deployed during joint operations, pilot projects, rapid interventions, joint return operations or technical assistance projects, and in accordance with the financial rules applicable to the Agency.

The global objective of this tender is to lease two different surveillance aerostats to carry out a pilot project, supported by a host Member State, Greece, aiming to assess the capacity and cost efficiency of aerostat performing coastal surveillance in an operational environment. The scope of the tender, aligned with the cited Regulation, is then to establish a service contract to deploy, operate and assess for a period one/two weeks two different surveillance aerostats, including in the contract the provision of the equipment and experts to conduct the trial.

For the purpose of this procurement a surveillance aerostat shall be understood as a lighter than air unpowered craft, statically fixed by a cable, capable to lift a downward-looking surveillance payload (more than 50 kg) and of sharing the data captured by its sensors with users in the ground via a broadband connection.



The scenario depicted in the figure above shows the trial set-up intended by Frontex to be put in place under this contract. The image presents two aerostat systems deployed in the coast of a host Member State. The sensors in the aerostats capture and pass surveillance data to the Local Coordination Centre (LCC) designated by Frontex. From the LCC the aerostat payload is controlled and the LCC transfers the information acquired by the aerostats to the International Coordination Centre in Athens via a broadband link provided by the host country.

<sup>1</sup> REGULATION (EU) 2016/1624 of 14 September 2016 on the European Border and Coast Guard

## 1.1. Introduction

One of the key objectives of Frontex is to keep Member States informed about new technological developments in the field of border control. In this regard, among other activities, Frontex, with the support of Member States, organizes live demonstrations of surveillance technologies under the format of 'pilot projects'.

Surveillance of EU external borders aims to create situational awareness by detecting and identifying irregular migration and other border related crime activities. EU Member States deploy in the EU external border set of sensors, communication systems, and command and control systems to create a cost-efficient situational picture facilitating their timely reaction capability.

## 1.2. The Problem

Two important concerns of border surveillance practitioners are affordability and persistence. In these two concepts aerostats may play an important role by providing cost-effective and persistent border surveillance platforms.

To evaluate how they works in practice in a coastal surveillance role, Frontex in cooperation with the Hellenic Coast Guard is organizing this trial, during which up to date solutions on aerostats will be deployed and assessed.

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## 2. Description of the tender

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The procurement defined in this document consists on the delivery by two different providers of two sets of surveillance aerostats, data transmission, payload control, data transmission and the necessary expertise to deploy and manage them. These two systems will be used for the execution of a pilot project to test, compare, and evaluate different surveillance aerostat. The deployment, test, and evaluation will be carried out in two fixed points of the coast of one EU Member State, over a specified timeline.

### 2.1. General Description

The scope of the tender is divided into two lots. Lot 1 refers to surveillance aerostat with camera, and lot 2 refers to surveillance aerostat with camera and radar. During the pilot project, the two selected providers will deploy their respective aerostat and will persistently transfer the information captured by the aerostat payload to the LCC. At the LCC staff from the host border authorities, properly trained and supported by the provider, will manage the payload and will be able to further distribute the information captured.

### 2.2. Assignment

The contract implementation consist of two Lots to be executed in the steps and phases described below:

Lot 1- surveillance aerostat with IR/EO camera

Lot 2- surveillance aerostat with IR/EO camera AND radar

#### 2.2.1. Kick - Off Meeting.

At the kick off meeting, each of the two contractors and Frontex will jointly decide on specific deployment sites and dates, training plan, and details related to the local logistic support to the deployment.

#### 2.2.2. Set-up Phase

This phase consists in the preparation by the contractors, together with Frontex, of the necessary tasks to implement the deployment of the respective aerostats, ground stations, connectivity to LCC, and training of host Member State staff.

#### 2.2.3. Trial Phase

This phase tasks consist in the actual provision of surveillance data from the systems deployed and operating for a period of time between 7 and 14 days, 24/7. The final length of the trial will be decided by the Contracting Authority after the contract signature with successful tenderers. Contractors should assure the proper operability of their respective systems and of providing support to the host Member State managing them at the LCC 24/7.

#### 2.2.4. Assessment Phase

This phase tasks consist in the joint evaluation of the results obtained by host Member State, Frontex, and providers. This evaluation shall include the appraisal of the surveillance tools used, systems reliability, and cost efficiency.

#### 2.2.5. Activity Timeline

The pilot project initiation and setup shall be started in the first quarter of 2018 followed by operational trials and assessment along 2018.

- Kick-off: Mid-March 2018

- Set-up Phase: Last week of March 2018
- Trial Phase: 7 to 14 days in the two first weeks of April 2018
- Assessment Phase: May 2018

## 2.3. Deliverables

### 2.3.1. Set-up Phase

- a. Project plan including a time schedule and work breakdown structure
- b. Equipment deployment, installation, and testing plan
- c. Information connectivity and data transfer testing plan
- d. Local staff training plan

### 2.3.2. Trial Phase

- a. Surveillance data and information capture by the aerostat payload
- b. Technical support provided by contractor's personnel to maintain the system operability during the days the system is operational, 24/7 trial period
- c. Technical support provided by contractor's personnel to the host Member State staff managing the system

### 2.3.3. Assessment Phase

- a. Contribution to the joint evaluation report

## 2.4. Venue

Services contracted under this tender procedure should be performed by the Contractor in any of two fixed sites in the north coast of the Greek island of Lesvos provided by the host Member State.

## 2.5. Working environment and conditions

The deployment of the aerostats will take place in a restricted area under control of the Greek authorities. The sites are secure, have electric power, and provide Internet broadband access via land line.

The contractors are responsible for the logistics including but not limited to: addressing custom and potential import issues, of getting the necessary clearance, of Air Traffic Control management, and of procuring the necessary maps of the Operational Area.

Frontex will put the service provider in contact with the designated Greek Point of Contact (PoC) responsible of the activity at the Local Coordination Centre, this PoC will facilitate the access to all necessary local support.

## 2.6. Experts description

The team of expert assigned to this contract by each of the eventual contractors should have demonstrable expertise (via CVs, publications, reports, etc.) in one or more of the following areas:

- Surveillance technologies
- Communications and IT technologies
- Aerostat's technology

The curriculum vitae must contain information regarding the relevant experience in these fields and his/her role in any project or activity described must be clearly stated. The expert shall also be in a position to fulfil the tasks described in these Terms of Reference without incurring in a conflict of interest with current or past employers, disclosing classified information, compromising or creating harm to third parties.

The experts taking part in the trial will be required to sign a Declaration of Confidentiality.

## 2.7. Reporting and Meetings

The working language of this assignment is English and all the deliverables produced by the Contractor shall be produced in English. All documents shall be delivered in editable electronic form in MS Word (please note that all the accompanying drawings, tables, graphics and supporting data shall be provided in an editable source format agreed with Frontex).

At least the following foreseen meetings are to be observed in the offer:

- Kick Off meeting to finalize and agree on the detailed necessary tasks to implement the deployment (to be held at Frontex premises in Warsaw)
- Daily meeting at the Local Coordination Centre participating in the trial with the person or persons designated by the Host Member State as Point of Contact responsible for the activity
- Final project meeting (to be held at Frontex premises in Warsaw.)

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## 3. Administrative Information

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### 3.1. Budget

The maximum budget earmarked for the contract is **400,000 Euro**, this budget will cover the two contracts to be drawn with two different providers.

Lot 1 - 170,000 Euro

Lot 2 - 230,000 Euro

Payment schedule for each of the providers:

- a) Set-up phase: 30% (pre-financing)
- b) Trial phase: 60% (balance payment, after completion of trial)
- c) Assessment phase: 10% (final payment)