FRONTEX OPEN TENDER: Frontex/OP/122/2013

"Purchase of aerial border surveillance service for the EU external land borders"

Clarification Document No. 1 - issued on 17.04.2013

Answers to the Requests for Clarification received from potential Tenderers

Question 1.

What is the required minimum number of supplementary occupants (passengers) on board besides flight crew (pilots + sensor operator)? It is noted passengers in plural, so minimum capability are TWO besides flight crew, correct?

Answer 1:

The minimum number of additional passengers on board is ONE.

Question 2.

Airport fees for opening ALEXANDROUPOLIS at night to be covered by the service provider or not? Answer 2:

The deployment within this contract is part of Joint Operation Poseidon Land 2013. For such kind of deployments Frontex aerial means are granted access to Alexandropoulis Airport for free.

Question 3.

Contradiction in the formulation of the requirement on remotely controlling the sensors; TWO requirements are stated one after the other. What is the difference between requirement in phrase 1 and 2? We assume 'SHALL' should be changed in 'SHOULD' in order to be in accordance with EU procurement law we believe as it is 'optional'.

- The surveillance system **shall** provide the possibility to control the onboard sensors on two ways by the operator on board and by the ground station.
- The system **shall** provide the possibility the onboard surveillance sensors to be controlled remotely by the ground station operator *(optional)*.

Answer 3:

The requirements to the control of the onboard sensors shall be understood as follow:

- The surveillance system shall provide the possibility to control the surveillance sensors by the operator on board;
- The requirement for the onboard surveillance sensors to be controlled remotely by the ground station **is optional**.

Question 4.

Please clarify requirement: Be able to operate below 150 Km/Hr (81 Kts). Definition of 'Operate'? Answer 4:

The platform shall be capable to fly and to perform aerial surveillance and the necessary data transfer at speed below 150km/hour.

Question 5.

IR signature:

a. The IR signature of an aircraft is related to detection by IR guided portable anti-aircraft missiles or personnel equipped with thermal surveillance equipment. None of these is normally linked to illegal-immigration.

b. IR signatures are in most cases classified NATO / EU SECRET or above. How will the Infrared signature of the aircraft be evaluated?

Answer 5:

The tenderer shall declare the compliance with the requirement set about the IR signature of the aircraft and to provide evidences in that regard upon Frontex request.

Question 6.

Sensor Capabilities:

a. Unless we missed it, there seem not to be any technical requirement for the sensors.

b. How are the EO / IR sensor capabilities evaluated?

Answer 6:

The tenderer shall declare the type, the model and the modification of the surveillance sensors on board, as well as their technical parameters defining the capabilities for aerial surveillance. This will give sufficient ground for evaluation the surveillance sensors.

Question 7.

Since minimum ceiling required, please confirm oxygen system for all persons on board is mandatory (EASA/ICAO legal requirement is oxygen to be provided for all part of the flight longer than 30 minutes above 10.000Ft (= 3.000m)

Answer 7:

It is responsibility of the tenderer to comply with the requirements set by the international administrative bodies ruling the implementation of civil aerial tasks and safety in the air.

Question 8.

Please clarify the requirement of 3.000 Kg Maximum Take-Off Weight, where as normal legal EASA classifications are 2.400 Kg or 5.700Kg.

Answer 8:

The tenderer may decide on itself which category of aircraft to propose. The particular limit had been created in order to make the requirement less restrictive and at the same time to establish better ground for competition.

Question 9.

Please clarify TCAS requirement:
a. Are we correct assuming it means ACAS cfr EASA / ICAO definitions?
b. Is it ACAS I or ACAS II?
Answer 9:
The aircraft is supposed to fly in an area with low intensity of air traffic. In that regard a Portable Collision Avoidance System (PCAS) will be also accepted.

Question 10.

Please clarify multi-spectral: are we correct assuming EO, IR and low light camera? **Answer 10:**

The surveillance sensors shall include at least:

- Electro optical camera;
- Infra red camera;
- Low light camera.

Question 11.

Please clarify the need for Digital **two-way** line of sight data-link with at least 150 km range and quad band capabilities;

a. Is by dual way meant FRONTEX intends to send data from ground to aircraft using the line of sight? If yes, what data?

b. Confirm the quad band requirement

Answer 11:

Frontex requires LoS data link to be used for real time data transfer between the aircraft and the ground station. The data-link shall support at least the communication exchange as follow:

- Transfer of pictures, videos and voice from the aircraft to the ground station;
- Voice communication from the ground station to the aircraft;
- Telemetric data for remote sensors management from the ground station to the aircraft (if optionally proposed).

There is no restriction about the line of sight data link to be flexible and interoperable with products operating in Ku, C, L or S-band, as well as with both analogue and digital waveforms. The main purpose is reliable and stable information transfer i.e. sensor data, imagery, streaming video command and control data.

Question 12.

How will the aircraft accident rate be evaluated?

a. What operations and are to be taken into account as some aircraft are operating in icing and extreme hot/cold environment, others are not.

b. In order to exclude issues of comparing apples to pears, can engine failure figures be provided instead?

Answer 12:

The aircraft and the entire surveillance system will be used in the geographical area as specified in the ToR p.1. and under weather conditions during the time of the year as stipulated in the Draft Contract, Special Conditions, Article I.2. Duration, p. 1.2.3.

The tenderer shall declare the accidents rate for the proposed aircraft taking into consideration the above conditions.

Question 13.

Please clarify what are the vocal radio communication requirements (VHF Border Guard network) **Answer 13:**

The voice communication shall be performed from one side between the aircraft and the ground station and from another side between the ground station and the ground patrols. The radios incorporated in the ground station and supposed to perform the communication with the ground patrols shall technically include the UHF Police frequency range.

In exceptional cases, like rapid reaction there may have a need of direct communication between the aircraft and the ground patrols. This is why the radio onboard the aircraft shall also technically include the UHF Police frequency range.