

## INVITATION TO BID

### Supply and delivery of Six (6) hybrid VTOL fixed-wing mid-range Unmanned/Unmanned Aerial Vehicles for the OSCE Special Monitoring Mission to Ukraine (SMM)

#### QUESTIONS and ANSWERS, batch 3

Dear bidders,

The OSCE would like to notify potential bidders of questions and answers batch 3:

1. Question: Should UAV be a vertical take-off and landing type?

Answer: As per mandatory requirements B.1, C.1.4, and D.1.1, the UAV system must be based on a hybrid fixed-wing aircraft with vertical take-off and landing capabilities. Fixed-wing UAVs which require hand/catapult take-off and belly/parachute landing will not be considered as part of this ITB.

2. Question: Is catapult start possible/applicable?

Answer: As per mandatory requirements C.1.4 and C.1.5, the aircraft must be able to take-off vertically from narrow areas. Therefore, catapult launch will not be considered as meeting these requirements.

3. Question: Is parachute landing possible/applicable?

Answer: Parachute landing can be considered only as a fail-safe mechanism. However, as per requirements C.1.4 and C.1.5, the aircraft must be able to land vertically on very small asphalted/cemented perimeters, therefore platforms based exclusively on parachute-landing functions will not be considered as meeting these requirements.

4. Question: Please specify the dimensions of baggage compartment of Toyota Land Cruiser B6/ B7, particularly if the seats are removable ones?

Answer: The size of the baggage compartment of Toyota Land Cruiser B6/B7 armoured vehicles utilized by the SMM is approximately 120 x 90 x 106 cm, without the seats folded. Please note that with the seats folded, SMM teams managed to transport UAV boxes with a maximum length of approx. 185-190 cm. Overall, smaller transportation boxes are preferred as they can be easier distributed between patrol vehicles.

5. Question: Training is to be delivered in Kiev, correct?

Answer: Yes, the Operator Training – B.12 and the Depot Maintenance Training – B.13 courses will be organized in Kyiv, with training flights due to take place at an airfield located in the outskirts of the city.

6. Question: Low signature aircraft: low visual, acoustic and thermal signature at 500m above the ground level. What is the precise parameter?

Answer: Requirement C.3.1 refers to the following parameters: acoustic signature (decibels) generated by the aircraft propellers while in VTOL or fixed-wing flight modes at 500m AGL, heat signature of the aircraft when detected by IR cameras or binoculars as well as overall aircraft visibility from the ground when operating at 500m AGL.

7. Question: Is UAV flight range equal to 25 km? Total range is 50 km, isn't it?

Answer: As per requirement D.1.2, the minimal mission range of the UAV system must be of at least 50km.

8. Question: D.1.7. Aircraft maximum speed: minimum 25 m/s? Why is this parameter indicated?

Answer: Due to environmental conditions (i.e. strong wind gusts, changing wind direction), the minimum aircraft speed of 25 m/s is required in order to ensure that the UAV can continue its mission or return to home in case of abrupt deteriorations of weather conditions.

9. Question: D.1.6. Operational speed: minimum 18 m/s? Why is this parameter indicated?

Answer: The minimum aircraft speed of 18 m/s is requested due to weather conditions in eastern Ukraine, particularly strong winds, which may hinder the aircraft from achieving the minimum 25km range from the GCS or conducting long endurance missions.

10. Question: Wires and electronic parts shielding. What is the level of shielding? What kind of materials to be used and by what methods?

Answer: The SMM is requesting the possibility of shielding UAV components or wires in order to ensure greater protection from EMI (electromagnetic interference) and RFI (radio-frequency interference), however without a specific shielding level. Materials such as flexile EMI/RFI/microwave absorbing material based on rubber or metal sheets, rubber tubes with metal cladding or different types of absorbing plastic or polyurethane will be considered.

11. Question: C.3.2. Please be aware that "manual mode" for the control of the aircraft is highly un-recommended due to the high risks involved when this is performed by inexperienced operators. Skills required to safely operate such systems in manual mode take years of practice and experience and only few people (generally test pilots) are qualified to safely do so.

As such, this feature is most of the times unavailable to the User, who can select between "fully autonomous" and "manually assisted" flight modes.

In order to avoid disqualifying most of the eligible and mature systems out in the market, please confirm that a system that does not offer full "manual mode" but allows "semi-manual mode" without compromising any system capability will be also accepted.

Answer: A system which allows "semi-manual" / "semi-assisted" flight modes will be accepted, provided that the aircraft can still conduct operational missions without any GPS support due to probable jamming.

12. Question: D.2.1. Please confirm that a payload solution that offers Full HD (1080p) resolution, higher optical zoom (<20x), and higher digital zoom are considered as "desirable" and will be positively evaluated accordingly.

Answer: Desirable features such as improved payload resolution or higher zoom rates will not influence the technical evaluation which shall be focused exclusively on mandatory requirements.

Only upon contract award, any available “Desirable” features may be requested by the SMM and may included in the Purchase Order prepared for the successful Vendor – see answer 5, batch 2.

13. Question: Request to extend the deadline for bid and questions submission by 2 weeks

Answer: Answer: Due to current project timeframes and internal staffing levels, the SMM cannot grant an extension of the bidding process which is expected to conclude on 3 August 2020 at 12:00 Kyiv time. Vendors are therefore kindly requested to submit bids before the given deadline. However, the deadline for requesting clarifications as part of the Questions and Answers stage of the tender, initially set for 20 August 2020, will be extended by one week until 27 August 2020 at 14:00 Kyiv time (the respective amendment is attached). .