

ITB/SMM/11/2011 - Question and Answers

Batch 5

1. Can you clarify one question for the Data Link channel according to the pos.3 of Technical requirements - pos. 3.1.-3.2. As we understood, there must be ONE digital channel with AES 128 bit encryption for both Video AND telemetry data with KLV-metadata implemented according to the MISB 0901 (Motion Imagery Standards Board). Is it correct?

Answer: Our requirement is that the UAV is able to live-stream video and telemetry data on a distance of at least 40Km from the GCS. This data link (both video and telemetry) must be encrypted, either through AES 128/256 or similar encryption protocols.

2. **Reference:** *Reference: DAP Terms and Conditions; OSCE "acceptance" of delivery; Mandatory Requirement for Operations Training.* When are the terms of the sale completed? At DAP execution? After delivery of the training?

Answer: The delivery is completed once all goods and services are delivered and received by OSCE.

3. **Reference:** There is a mandatory requirement for operations training. What happens if a platform crashes during training? Who is responsible? What if it is weather/act of God related (i.e. no negligence or pilot error)? Related, what are the offeror's liabilities during training? Will the OSCE please clarify the legal responsibility (and liability) for the aircraft during training?

Answer: The training will be conducted in a controlled environment, at one or more airfields outside of Kiev in order to have sufficient open space and to mitigate the risk of the UAV crashing on private property.

No training flights will be conducted in wind speeds over 15 m/s or in extreme weather conditions which are beyond the UAV's capabilities.

All responsibilities and liabilities are with the bidder until all equipment and services are delivered to the OSCE (including training). The bidder is responsible to have third party insurance for the UAVs for the duration of the training.

As such, we expect that the contractor will provide sufficient equipment in order to ensure that the training is carried out as planned. The OSCE will have no responsibility for unexpected situations which may lead to damaging the platform.

3. **Reference:** Operational Requirement #1.5 and #5.1 - OR #1.5 requires a platform capable of "all-terrain belly landing" and OR #5.1 requires all components to be "water proof." It is unclear if the OSCE SMM intends to use the UAVs over the water and to land the bird in open water. Does the OSCE SMM intend to land the platform in the water? Is the requirement to be "water-proof," i.e. submersible, or "water-resistant," i.e. impervious to rain and weather based operating conditions but not submersible? Does the payload need to be enclosed in a waterproof structure?

Answer: The SMM does not intend to land the UAV in open water, therefore submersible equipment is not necessary. The requirement that all components have to be water proof is due to the fact that we intend to conduct flights in adverse weather conditions (rain, sleet, snow) and consequently we must ensure that critical components will not be affected in case of high humidity.

3. Reference: Operational Requirement #1.1, Technical Requirement #4.1 - OR #1.1 requires the system to be “hand-held” and TR #4.1 requires the ground control system to be “hand-held.” It is unclear what size/configuration of systems constitutes “hand-held.” Does the term “hand-held” denote any configuration that is mobile (i.e. not a fixed site)? Is a truck-mounted system acceptable? Is a laptop and monitor acceptable?

Answer: The SMM requires a UAV platform that is easily portable and which can be transported and launched from non-permanent pre-surveyed launch points (Operational requirement 1.1). Both the UAV and the GCS should fit in one or two armored vehicles and should not require more than two persons to carry and set up. By “hand-held”, we understand a mission planning laptop (+additional monitor, if necessary), connected to a GCS antenna which is mobile and an airframe which can be disassembled in a carrying box that could fit in armored vehicles (i.e. B7 Armored Toyota Land Cruiser). A truck-mounted system would therefore not be acceptable for our purposes.

4. It is not clear either there must be one camera with two modes EO and IR or it must be payload with two paired cameras? Also is it necessary to supply additional thermal vision camera (LWIR)? Can we supply payload with one camera which has two modes - EO/IR?

Answer: One camera with two modes (EO and IR) is preferable. However, a solution with two paired cameras is also acceptable. Please note that the IR camera must be thermal (LWIR), as described under Technical Requirement point 2.2 – “IR (thermal) camera with minimum 640x480 resolution and minimum 2x digital zoom”.