UAS Workshop

UAS Data Management Principles

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General Definitions and Observations

- **Sensors collect Full Motion Video (FMV) of areas interesting to the mission for operational reasons**, e.g. force protection, support of operations.

- **FMV bands** usually are Electro-Optical (EO), Infra-Red (IR), Synthetic Aperture Radar (SAR) and possibly Ground Penetrating Radar (GPR, currently not in use with UN missions).

- **Sensors are static or mobile.**
  Static are masts (height up to 45 m), mobile are manned or unmanned aerial or ground vehicles.
General Definitions and Observations

- **FMV format** standard or proprietary, resolution low [e.g. CCTV] to very high [HD, high-end]

- **FMV analysis** either live or post-mission (database).

- **Post-mission analysis** product using PowerPoint, converted to pdf and stored in database (e.g. iBase).

- **FMV data storage** for post-mission analysis with highest resolution.
UN Data - Ownership

The Parties acknowledge and agree that all data, images, video clips, information, meta-data, renderings and information captured and/or stored by the Force Protection and Security Technology Equipment arising out of or in connection with the performance of Services under this Letter of Assist shall remain the property of the UN (“UN Data”), and shall become the property of the UN upon its capture or creation.

It is understood that, in addition to the data described in the preceding sentence, UN Data shall also include any other data and information that may be exchanged between the Parties in connection with the Letter of Assist and that is designated confidential by MINUSCA. To ensure the due treatment of the UN Data, the Government shall comply with the procedures and protocols outlines in Appendix V hereto.
UAS Components Overview

Satellite

UAV

Payload

Ground Control Station (GCS)

Ground Data Terminal (GDT)

Remote Video Terminal (RVT)

Command and Control

Support Equipment
Micro UAS

- Live feed to GCS
- Operational user at GCS location
- FMV stored by Owner (TCC/UNOE)
- Data Transfer to Mission on request
Mini/small/MALE UAS

- Live feed to GCS
- Live feed hand-over to FTS
- Live Feed to supported Unit via RVT
- FMV stored by Owner (TCC/UNOE)
- Data Transfer to Mission on request
FMV Data Basics

- The information collected by UAS is very valuable and must be retained as it could have future intelligence value.

- Ideally, FMV data should be retained, stored and archived in such a way that it is possible to identify and retrieve the data at a future point in time, including relevant meta data.

- Mission to define requirements with regard to FMV retention time and locations.

- FMV data is regularly to be considered classified data, therefore it has to be stored in a secure way.

- Ensure that all data outputs are common standards and formats.

- Any TCCs or commercial companies service providers that seek to introduce proprietary standards that cannot be integrated should be rejected at the earliest opportunity.
Data Requirements

Meta Data
- FMV to contain minimum meta data, including date, time and geolocation
- Textual data must be discoverable in both structured and unstructured formats

Networks
- Data must be in open standards format (e.g. mpeg)
- No proprietary data sets
- UN HQ must work with TCCs and contract provided UAS to ensure data can be ingested into current and future architectures

Storage
- TCCs and contract provided UAS must have the ability to store all data until such time that it can be ingested into UN architectures for long term storage
Questions?