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| OPERATING ORGANISATION |
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| Double-click Header and insert the Operations Organisation number as per the format. Example: OO-ACME-P4PRO-001-00 |

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| **Guidance on Completion of Operating Organisation Template** |
| The UAS Operating Organisation (OO) is the support environment for your commercial UAS operations and includes all your people/personnel requirements and your management principles. This includes matters like personnel qualifications, experience levels and licensing requirements, as well as people responsibilities and functions for the various incumbents. Management principles are instilled through development, promulgation and adherence to organisational processes and procedures. |
| These are the third “M” and fourth “M” – MANAGEMENT and MAN – in the 5M Model, as elaborated on in the Drone Safety Handbook. |
| The Template provides a place where you can insert a simplified Organisation Structure, with specific emphasis in UAS operations and more specifically incumbents having a direct impact on safety. As a minimum, your Structure should indicate the following incumbents:* Operations Manager (the “accountable manager”);
* UAV pilot
* UAS technician
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| The Template also requires the specification of incumbent responsibilities and functions, required qualifications, minimum experience levels and any sort of licensing or specific training required. |
| All safety-specific incumbents noted within the Template should sign the completed document to verify and declare that the information provided and declarations made are true and accurate. |
| The final section in the Template provides a listing of all safety-related organisational processes, procedures and checklists. |
| **Template Colours** |
| *The following prominent colour coding is used within the SOO Template:* |
| *NOTE fields* | General guidance to assist with Template completion. |
| Yellow user-editable fields | Fields where the compiler should add information. |

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| **Operating Organisation Chart** |
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| *NOTES:** *The Operating Organisation Chart should be edited to reflect the actual organisation.*
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| **Safety-Related Responsibilities** |
| ***NOTE: The following responsibility listings are typical for each incumbent and should be adapted as per national UAS Regulations or as per your own organisation, as required.*** |
| **UAS Operations Manager** |
| * Promotion of the Safety Culture within the organisation.
* Promotion of a “Just Culture” within the organisation.
* Promoting an atmosphere of “open communication” and “safety reporting” amongst employees.
* Addressing negligence, wilful misconduct or any form of destructive acts.
* Ensuring that employees are committed to the Safety Framework, Safety Policy and expectations promoted through adherence to the company Safety Management System (as required).
* Ensuring that employees are appointed based on qualifications, experience and exposure to the type of tasks required from them.
* Ensuring that any knowledge shortfalls are addressed through formal training programs.
* Ensuring that all identified safety hazards and associated risks are addressed and resolved as per the company Safety Processes.
* The Operations Manager assumes final and overall accountability for all safety-related matters within the organisation.
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| **UAV Pilot** |
| * Adherence to specific Regulatory limitations and restrictions;
* Adherence to national Aviation Regulator instruction, licenses, clearances, certificates, permits or any other form of authorisation.
* Recording of flight hazards and reporting of hazards to the Operations Manager and Safety.
* Ensuring that all hazards have been addressed before commencement of flight planning activities.
* Management of all continuation training and currency retraining, as required by the UAS Original Equipment Manufacturer (OEM) or as required by the national Aviation Regulator.
* Safety aspects relating to flight and mission planning, including:
	+ Planning aspects regarding site selection;
	+ Planning aspects regarding obstacle identification at planned flight location;
	+ Planning aspects regarding proximity to uncontrolled / non-participating persons, public property and national roads expected at planned flight location;
	+ Planning aspects regarding proximity to sensitive, prohibited and restricted areas, and other national key points;
	+ Planning aspects regarding airspace class, air traffic, nearby aerodromes, no-fly zones and related communications requirements at planned flight location;
	+ Planning aspects regarding weather and climatic conditions;
	+ Planning aspects regarding emergencies, emergency abort zones, emergency recovery areas and flight termination areas.
* Safety aspects relating to on-site evaluation (conducting of the Site Survey) prior to flight, including:
	+ Identification of obstacles;
	+ Identification and assessment of local population (location, density, movement);
	+ Identification and assessment of proximity to roads, structures, sensitive areas, national key points;
	+ Identification and assessment of proximity to aerodromes and air lanes;
	+ Selection of deployment, run-up, inspection, take-off and normal recovery zones;
	+ Selection of emergency hold areas;
	+ Selection of emergency recovery points;
	+ Selection of flight termination areas;
	+ Identification of sources of potential electromagnetic interference.
* Safety aspects relating to pre-flight inspection and checks, including:
	+ Radio Communications checks;
	+ Weather check;
	+ Engine run-up/power check;
	+ Lighting check;
	+ Pre-take-off warning check (via Ground Controller);
	+ Program flight waypoint verification;
	+ Data Link signal strength check;
	+ GNSS signal strength check;
	+ Critical flight systems check.
* Safety aspects relating to flight execution, including:
	+ Take-off/launch;
	+ Flight path;
	+ Guidance control;
	+ Flight modes;
	+ Flight attitude;
	+ Flight altitude;
	+ Flight speeds;
	+ Obstacle avoidance;
	+ Separation from other aircraft;
	+ Communications;
	+ Data Link strength management;
	+ GNSS link strength management;
	+ Power/battery level management;
	+ Monitoring of telemetry data/warning messages;
	+ Waypoint adjustment;
	+ Avoidance of third party persons and third party property;
	+ Normal landing/recovery;
	+ Management of emergencies during flight;
	+ Emergency recovery;
	+ Flight termination
* Safety aspects relating to after-flight inspection and checks (if not performed by the UAS Technician), including:
	+ Inspection for damage;
	+ System failure identification.
* Safety aspects relating to in-flight emergencies or critical system failures, including:
	+ Management and selection of Flight Modes;
	+ Monitoring of Telemetry Link and related data for warnings and failures;
	+ Execution of Emergency Recovery procedure;
	+ Execution of Flight Termination procedure;
	+ Third party person and obstacle avoidance during emergencies.
* Activation of Emergency Response Plan (as required) and completion of the Emergency Checklist following a flight-related accident or incident.
* The UAV Pilot is responsible to ensure safe flight during the execution of tasks.
* The UAV Pilot is ultimately accountable for all safety aspects during the execution of a flight, including flight at B-VLOS ranges.
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| **UAS Technician** |
| * UAS serviceability.
* UAS technical airworthiness.
* Embodiment and recording of all modifications, upgrades and changes to the UAS (including software and firmware), in accordance with OEM instructions.
* Execution of UAS preventive maintenance (Scheduled Maintenance / Services), and related recording activities, in accordance with the OEM instructions.
* Execution of UAS corrective maintenance (Repairs / Fixes), and related recording activities, in accordance with the OEM instructions.
* Conducting of post-maintenance and post-repair ground tests, ground runs and system tests.
* Recording of technical hazards and reporting of hazards to the Operations Manager and Safety.
* Obsolescence management.
* Spares and parts control.
* Management of all continuation training and currency retraining, as required by the UAS OEM or as required by the national Aviation Regulator.
* Technical damage assessments following accidents or incidents.
* Safety aspects relating to after-flight inspection and checks (if not performed by the UAS Pilot), including:
	+ Inspection for damage;
	+ System failure identification.
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| **Safety** |
| * Promotion of company safety processes.
* Safety training.
* Proactive hazard assessment.
* Reactive hazard assessment.
* Risk determination and risk elimination / reduction / control mechanisms.
* Accident and incident investigation.
* Safety audits.
* Safety performance monitoring.
* Safety advice, as required.
* UAS Operating Organisation Risk Assessment preparation / updates.
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| **Quality** |
| * Promotion of company quality processes.
* Measurement of quality in respect of the product being delivered to clients.
* Quality training.
* Configuration management.
* Document control.
* Quality audits.
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| **Security** |
| * Company access.
* UAV take-off and landing zone access control.
* Crowd control during operations.
* UAS safekeeping.
* UAS data / client data safekeeping / access / security.
* Media management / access to information.
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| **Other Core Functionaries** |
| * As required.
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| *NOTES:** *The Operations Manager is the person primarily responsible for direction regarding all UAS-related matters within the Operating Organisation. It could also be the CEO or General Manager, or someone specifically appointed to manage and coordinate UAS-related matters within the organisation.*
* *The UAV Pilot is the person responsible for operating (flying) the UAV. This individual should have the necessary experience and qualifications to conduct commercial or experimental UAV flight.*
* *The UAS Technician is the person responsible for all technical matters pertaining to the UAS, including scheduled maintenance, corrective maintenance (repairs), upgrades, modifications, software updates, trouble-shooting, and so forth. In certain instances, the UAS Technician may require special accreditation from the Aviation Regulator, depending on the complexity of the UAS, or as per national UAS Regulations.*
* *Safety is the person responsible for all safety-related aspects associated with UAS Operations, including development and enforcement of the Risk Assessment, hazard assessment, development of mitigating procedures, and general safety awareness within the Organisation. Depending on the nature and rigour of the national UAS Regulations, this function could be attributed to an individual having the correct levels of expertise, experience and qualifications, of it could be attributed to one of the existing functionaries, e.g. the Operations Manager.*
* *Quality is the person responsible for all quality-related aspects associated with UAS Operations, including documentation, record-keeping, configuration control, change management, stakeholder relations and quality of work output to clients. Depending on the nature and rigour of the national UAS Regulations, this function could be attributed to an individual having the correct levels of expertise, experience and qualifications, of it could be attributed to one of the existing functionaries, e.g. the Operations Manager.*
* *Security is the person responsible for all security-related aspects associated with UAS Operations, including crowd control during flight, lock-up security, access control, payload data security and client security. Depending on the nature and rigour of the national UAS Regulations, this function could be attributed to an individual having the correct levels of expertise, experience and qualifications, of it could be attributed to one of the existing functionaries, e.g. the UAV Pilot.*
* *Other core organisational personnel, having a direct and important role with regards to the organisation’s UAS operations, should also be noted.*
* *The responsibilities noted in the assessment:*
	+ *Should relate to UAS Operations; and*
	+ *Should relate to safety matters.*
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| **Alternate Functionaries** |
| **UAS Technician** | function to be performed by | Click here to enter text. |
| **Safety** | function to be performed by | Click here to enter text. |
| **Quality** | function to be performed by | Click here to enter text. |
| **Security** | function to be performed by | Click here to enter text. |
| *NOTES:** *Alternate Functionaries are organisational incumbents performing the duties of other (normally-expected) appointees, e.g. a UAV Pilot also acting in the capacity of a UAS Technician.*
* *The above alternate functionaries may only be substituted as listed above if so authorised by the national Aviation Regulator.*
* *Alternates listed here should not be noted by name, but by function (e.g. “UAS Operations Manager” or “UAV Pilot”, etc.).*
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| **Declaration of Personnel Competence** |
| **UAS Operations Manager** |
| *General Qualifications:* |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| *UAS-Specific Qualifications:* |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| *General Aviation Experience:* |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| *UAS-Specific Experience:* |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| **UAV Pilot** |
| *General Piloting Qualifications:* |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| *UAS-Specific Piloting Qualifications:* |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| *General Piloting Experience:* |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| *UAS-Specific Piloting Experience:* |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| **UAV Technician** |
| *Alternate Functionary (if applicable)* | Alt Functionary. |
|  **!!! If Alternate Functionary, List Related Competence !!!** |
| *General Technical Qualifications:* |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| *UAS-Specific Technical Qualifications:* |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| *General Technical Experience:* |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| *UAS-Specific Technical Experience:* |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| **Safety** |
| *Alternate Functionary (if applicable)* | Alt Functionary. |
|  **!!! If Alternate Functionary, List Related Competence !!!** |
| *General Qualifications:* |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| *Safety-Specific Qualifications:* |
| Safety Qual. |
| Safety Qual. |
| Safety Qual. |
| Safety Qual. |
| *General Aviation Experience:* |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| *Safety-Specific Experience:* |
| Safety Exp. |
| Safety Exp. |
| Safety Exp. |
| Safety Exp. |
| **Quality** |
| *Alternate Functionary (if applicable)* | Alt Functionary. |
|  **!!! If Alternate Functionary, List Related Competence !!!** |
| *General Qualifications:* |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| *Quality-Specific Qualifications:* |
| Quality Qual. |
| Quality Qual. |
| Quality Qual. |
| Quality Qual. |
| *General Aviation Experience:* |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| *Quality-Specific Experience:* |
| Quality Exp. |
| Quality Exp. |
| Quality Exp. |
| Quality Exp. |
| **Other (as required)** |
| *General Qualifications:* |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| Gen Qual. |
| *UAS-Specific Qualifications:* |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| Drone Qual. |
| *Aviation Experience:* |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| Gen Exp. |
| *UAS-Specific Experience:* |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| Drone Exp. |
| **Declaration** |
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| I hereby declare that the information pertaining to my Qualifications, as well as any aviation-, UAS- or other Experience listed herein, is correct, accurate and true. |
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| ***UAS Operations Manager*** | signature |
| ***UAV Pilot*** | signature |
| ***UAS Technician*** | signature |
| ***Safety*** | signature |
| ***Quality*** | signature |
| ***Security*** | signature |
| ***Other*** | signature |
| *NOTES:** *Only state the Qualifications – actual proof of Qualifications to be supplied to the national Aviation Regulator on request.*
* *If certain of the functions, e.g. Safety, Quality or Security, will be performed by other Organisational Functionaries, then the qualifications and experience of the alternate functionary – pertaining to the section being completed – must be declared in the appropriate fields.*
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| **Applicable Documents, Manuals and Checklists** |
| **Document Title** | **Document Number and Revision** |
| Title. | No & Issue. |
| Title. | No & Issue. |
| Title. | No & Issue. |
| Title. | No & Issue. |
| Title. | No & Issue. |
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| Title. | No & Issue. |
| Title. | No & Issue. |
| Title. | No & Issue. |
| *NOTES:** *List all applicable manuals, handbooks, checklists and other important safety-related documents.*
* *Documents listed here are typically provided by the Drone OEM or developed by the System User.*
* *Examples include: flight planning, pre-flight, after-flight, site assessment, emergencies, scope of operations, safety footprints, risk assessments, special safety precautions, flight folio, maintenance manuals, maintenance logs, repair manuals, repair logs, upgrade and modification logs, failure records, safety manual, quality manual, personnel records, UAS operating manual, and so on.*
* *Add additional entries as required.*
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