OPENING REMARKS AND KEYNOTES

- 1st symposium on RPAS in Africa.
- Utilization of unmanned aircraft is increasingly getting diverse and complex posing challenges to safety of other aircraft and controlled airspace in general.
- ICAO is committed to developing standards and recommended practices and guidance material to augment industry efforts to ensure appropriate training, licensing of personnel and operation and oversight of unmanned aircraft operations.

SETTING THE SCENE

- There is a high industry demand for RPAS and drones; it is an exponential phenomenon.
- In order to address the challenges of the disparity between the fast growing RPAS and drone technology commensurate regulatory framework should be innovatively developed to establish a harmonized system.
- There is a need for building supportive frameworks that can innovatively ensure safe RPAS and drone operations.
- There is need for seamless integration of RPAS operations into ATM in a harmonized Air Navigation Services environment to be effective in non-segregated airspace.

DEVELOPING A REGULATORY FRAMEWORK

- Two streams of regulation are needed – one for RPAS, one for drones; these regulations facilitate different types of unmanned aircraft with their different types of equipment and operations.
- States should embrace training of personnel to address the challenges of RPAS technology and associated systems that require high-level aeronautical knowledge for their operators and maintenance personnel including Computer based training.
- There is need to increase awareness and sensitization of community and government authorities on UAS operations, differences between RPAS and drones and what these differences require in terms of regulations and procedures.
ENABLING OPERATIONS AND THE FUTURE

- There is need to segregate RPAS and drone operations in an organized and effectively regulated environment. RPAS must comply with existing ATM and CNS requirements, whereas drones normally won’t.
- In order to cope with the rapid advancement, volume and scope of unmanned aviation operations appropriate investment should be done to foster the digitization and automation of associated systems.
- An AFI Region task force should be established to ensure systematic and strategic, monitoring of activities and investigation of incidents and accidents involving RPAS and drones.

ENSURING SAFE OPERATIONS IN AN ATM ENVIRONMENT

- Need of harmonized regulatory processes that integrate military/civil aviation coordination.
- International/commercial operations should be done in a cohesive strategic manner to ensure appropriate compliance with requirements and practices and oversight while maintaining effective integration with ATM systems.
- It’s critical to have effective RPAS monitoring and implementation and sharing of documentation of activities.
- States should consider development and harmonization of regulations with relevant RPAS provisions under the framework of Regional safety oversight organizations (RSOOS).
- States should consider adoption of Delegated authority practice and/or integration of such systems within the CAA regulatory framework.
- There is need to have a standardized operations approval process that will allow a comprehensive RPAS/drone oversight.

TECHNOLOGY

- In line with the recommendation of the African Telecommunications Union (ATU/UAT), States are strongly encouraged to ensure that RPAS operations are conducted within the framework of globally harmonized spectrum for UAS in accordance with both WRC-12 and WRC-15 (Resolution 155), which together identify 5030-5091 MHz (C-band) as well as fixed satellite service networks (Ku-band).
- AFI states should promote and maintain support for protection of aviation spectrum and/or explore expansion of spectrum availability in the future in collaboration with the ATU and national communications commissions as applicable.
- CAAs and national telecommunications regulators should establish and/or increase collaboration to deliver rules and regulations providing more routine access to airspace and the necessary spectrum resources that RPAS will require in the coming years.
CROSS-BORDER OPERATIONS

- Public acceptance is essential; different concerns may be raised in different States or societies.
- Manufacturers must adapt their products to fit the type of operation.
- Existing regulations for manned aviation can be used as a basis for assessing the hazards, risks and mitigations to authorize operations – once authorized by the first State, then coordinate with other affected States.
- AFI States should endeavor to ensure integration of RPAS operations in line with Single African air transports market towards YD implementation.

MULTI-STATE OPERATIONS

- Software programmes can leverage nationally developed regulatory and airspace data for ease of operational approvals.
- Technology can mitigate for many aspects including human factor error, loss of C2 link.
- Successful distinction in regulatory frameworks based on levels of technology (performance-based approach to regulations) will best support introduction of RPAS and drones.

GOING FORWARD

- AFI States should strengthen collaboration and cooperation between State regulators; between regulators and operators; and with other stakeholders (telecommunications, aerodromes, ANSPs, military, medical, etc.) to ensure effective, appropriate regulations leading to safe RPAS and drone operations.
- AFI States and industry should participate in industry standards-making bodies such as ISO.
- Strong efforts should be undertaken to empower and train African youth, male and female, to bring their familiarity with technology into the RPAS/drone arena.

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