

**57th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

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AGENDA ITEM 3: AVIATION SAFETY

**VIRTUAL SURVEILLANCE DURING PANDEMIC:
REQUIRING GUIDELINES FOR FUTURE USE**

Presented by Bangladesh

SUMMARY

Traditional safety oversight audits and inspections are not possible during times of public health emergencies (a pandemic). Safety oversight activities by States have significantly been affected by the impact of COVID19 due to movement control and border measures. Due to the imposition of public health restrictions, regular on-site audit/inspection are not possible and has to be carried out virtually by both the regulator and the service providers under the State's Safety Oversight Obligations.

Therefore, despite a pandemic situation, States have to continue with their safety surveillances with hybrid/remote delivery options in addition to the onsite activities. Proper regulatory guidelines will help the States in such situations.

VIRTUAL SURVEILLANCE DURING PANDEMIC: REQUIRING GUIDELINES FOR FUTURE USE

1. INTRODUCTION

1.1 The world had been severely impacted by the Covid 19 since December 2019. This has resulted in forced lockdowns and brought all mobility to a grinding halt severely affecting aviation, among other sectors. Until sufficient portions of the population have been vaccinated, movement control and border measures are likely to remain. These movement control and border measures, which typically place border entry restrictions or isolation requirements, have hampered the deployment of inspectors to conduct safety oversight activities both locally and overseas. Even as the COVID-19 situation transitions to an endemic stage whereby more social and economic activities would resume, restrictions may be implemented or retained according to the prevailing COVID-19 situation locally and globally.

2. DISCUSSION

2.1 In two years COVID-19 has gone from being an emergent health crisis to a fact of life that has reshaped societal behaviors into a new normal era. The COVID-19 pandemic caused a drop in airline activities by 60 percent in 2020. Air travel and tourism are not expected to return to 2019 levels until 2024. Despite a pandemic situation, safety oversight activities must continue and be carried out effectively at the national level in support of safe recovery. COVID-19 provides the impetus for regulators and organizations to adopt new ways of working and collaboration. In the Asia/Pacific region, the APAC COVID-19 Contingency and Recovery Planning Group (ACCRPG) has sought to share best practices and provide practical guidance to member States and administrations. Many States have adapted their safety oversight approaches through the conduct of virtual surveillance.

2.2 Virtual Surveillance

2.2.1 A comprehensive virtual safety audit/surveillance has already been practiced by many States. Normally the remote/virtual safety audits/inspections comprise three components: 1. Regulations/Special procedures 2. Digital audit for review of documents 3. Virtual Inspection. This virtual surveillance during the pandemic was very useful in restoring the public's confidence in traveling again.

2.2.2 For easy compliance by the service providers the applicable regulations need to be augmented. The augmented requirements could be specified in the following forms e.g. making amendments to the regulations or Directives and developing a revised compliance checklist. All evidence so gathered are to be submitted on the digital platform – soft copies of reports/aeronautical studies and photographs as well as video clips of the various items of “inspection” are to be made. The regulator will then review these documents with the service provider comprehensively via video conferencing or Zoom meeting. On the day of the virtual audit/inspection, the regulator and service provider can have a video conference to review the virtual audit/inspection procedures, clarify the scope of the audit and its duration;

2.2.3 Virtual surveillance (audits and inspections) through remote means such as video/audio calls and electronic documentation review are in practice by some States even before the COVID-19, due to various circumstances preventing in-person presence. Virtual surveillance can be cost-effective and productive by reducing travel and the associated administrative work. It allows regulators to reallocate resources and thus provide time to focus on core regulatory activities. One of the benefits of the COVID-19 is that it has introduced greater momentum to the use of virtual surveillance and it is most likely that remote surveillance will remain an attractive option for States far beyond the COVID-19 endemic.

2.2.4 While virtual means should be encouraged as an interim measure when physical safety oversight activities cannot be held, these cannot entirely replace onsite inspections and audits. This is especially so for inspections and audits of operations, and qualification of equipment such as flight simulation training devices (FSTD). Furthermore, ground observation performed during on-site audits and inspections provide valuable insight into the safety commitment and culture of organizations and teams. These inputs are harder to gather through remote on-screen engagement. Remote/virtual means also present some challenges such as limitations on non-verbal communication and coordination problems during meetings.

2.2.5 Moreover, the use of virtual means should be guided principally by oversight effectiveness considerations. The decision to use remote means should depend on various considerations such as the scope of audit/inspection, the ability of the regulated entity to engage effectively via remote means, human factors, fidelity of the remote means, and other considerations. Given the potentially wider adoption of remote surveillance, ICAO, States and the industry can collectively work together to develop a framework/guidance material for remote surveillance. This will in turn help in laying down the principles and guidance for decision-making and for standardization. The framework so suggested will help State decision-making on the use of virtual surveillance and will enable standardization in remote methods and technical specifications, to achieve quality in remote/virtual surveillance.

2.3 International Collaboration and Information Sharing

2.3.1 The COVID-19 situation has presented an opportunity for the States to collaborate and assist one another in their safety oversight activities by facilitating the surveillance of overseas approval holders. Where necessary, the facilitation of onsite audits of organizations located overseas would be useful.

2.3.2 Nevertheless, States may agree to bilateral arrangements to facilitate the exchange of relevant safety information derived from their onsite safety oversight activity. Typically, onsite audits may gather a wider range of information such as observations from walking the ground, paper records that could not be digitized, and ad-hoc interviews with personnel, which may not be available through virtual means.

2.3.3 The information so generated from onsite audits could therefore complement information obtained from virtual surveillance. This information could be shared with the other States to ensure prompt attention to risk mitigation in support of safe recovery.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) Urge ICAO, States and industry to collectively work on the development of a framework to guide the States for use of remote surveillance; and
- b) Encourage States to assist one another in safety oversight through the exchange of relevant information obtained from their safety oversight activities to ensure prompt attention to risk mitigation in support of safe recovery.