



HONG KONG AVIATION SAFETY PROGRAMME 2022 – 2026



This Aviation Safety Programme is produced pursuant to Annex 19 to the Convention on International Civil Aviation – Safety Management by the Hong Kong Civil Aviation Department in conjunction with the concerned government departments.

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FOREWORD

The ICAO Annex 19 stipulates that each State/Administration shall establish a State Safety Programme (SSP) for the proactive management of safety in civil aviation systems under its purview. The Civil Aviation Department (CAD) has the regulatory responsibilities for aviation safety in Hong Kong. It is therefore incumbent upon the CAD to undertake the implementation of SSP related activities in Hong Kong.

It is our long-standing pledge and commitment to sustain and improve the aviation safety standards of Hong Kong and to maintain our position as a leader in the promotion of aviation safety within the region. This Hong Kong Aviation Safety Programme, developed pursuant to the ICAO Annex 19, sets out the strategies we have adopted for the implementation of SSP.

We will continue our efforts in pragmatically introducing performance-based regulatory elements in our safety oversight to focus on relatively higher risk areas based on all available information, and seek assurance that those risks are proactively mitigated through effective means. We will also strategically coordinate new global safety initiatives with reference to ICAO's Global Aviation Safety Plan which laid down a roadmap for safety up to 2030.

In this connection, I am happy to note that in 2017, we have completed the actions needed to align with the ICAO SSP framework. We will continue the course for alignment with the global objectives as appropriate. Recognising that a positive safety culture is a core tenet of safety management, we and other concerned authorities of Hong Kong are committed to collaborating with our industry partners and the international aviation community in the journey to maintain a safe, resilient and sustainable aviation system conducive to the advancement of aviation developments.

Whilst we have implemented ICAO's mandates for aviation service providers to establish safety management systems, we strive to continuously enhance the safety oversight and performance monitoring of all functional areas in aviation. We will also continue to facilitate safety promotion with and amongst stakeholders including regulators and service providers, and encourage safety partnership across sectors.

Safety is our highest priority. We uphold our commitment to provide a safe, efficient and sustainable air transport system in Hong Kong.



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OVERVIEW

The ICAO Annex 19 – Safety Management stipulates the requirements for States/Administrations to establish an SSP in order to proactively manage safety in civil aviation. This Annex consolidates the overarching safety management provisions from Annexes 1, 6, 8, 11, 13 and 14 for personnel licensing, operation of aircraft, airworthiness of aircraft, provision of air traffic services, aircraft accident and incident investigations and aerodrome operations. As a means to measure safety performance of civil aviation systems and progress of safety objectives, States/Administrations are also required to establish the safety performance indicators.

In compiling this SSP, efforts have been made to align the format, structure and contents of the Programme as closely as possible with the ICAO Annex 19 and Safety Management Manual (Doc 9859) (SMM). This will not only enable Hong Kong to align its SSP development to meet the associated ICAO Standards, but also facilitate the ongoing maintenance of SSP in a structured and effective manner. Readers should read this Programme in conjunction with the ICAO Annex 19 and SMM.

Applicability

The provisions in this Programme are developed with reference to the SARPs contained in the ICAO Annex 19, and they shall be applicable to safety management functions related to, or in direct support of, the safe operation of aircraft.

In line with the basic principles of safety management, the ultimate objective of SSP is the continuous improvement of aviation safety. The four SSP components in [Table 1](#) are based on ICAO's framework.

This Programme will be periodically reviewed and enhanced, in the light of experience, such that it remains up-to-date, relevant and appropriate to our aviation systems.

Table 1 - Hong Kong Aviation Safety Programme Framework¹

1. State Safety Policy, Objectives and Resources	[Annex 19 Chapter 3.2]
1.1 Hong Kong safety legislative framework <ul style="list-style-type: none">• Primary aviation legislation and enforcement policies (CE-1) (Chapter 2.1.1 & 2.4)• Specific operating regulations (CE-2) (Chapter 2.1.2)	
1.2 Hong Kong safety responsibilities and accountabilities <ul style="list-style-type: none">• State system and functions (CE-3) (Chapter 1.1)• Qualified technical personnel (CE-4) (Chapter 2.2.2)• Technical guidance, tools and provision of safety-critical information (CE-5) (Chapter 2.1.2 - 2.1.4, 4.1)	
2. State Safety Risk Management	[Annex 19 Chapter 3.3]
2.1 Licensing, certification, authorization and approval obligations (CE-6) (Chapter 4.1.1)	
2.2 Safety management system obligations (Chapter 3.1) <ul style="list-style-type: none">• Safety requirements for the service provider's SMS• Agreement of the service provider's safety performance	
2.3 Accident and incident investigation (Chapter 2.3)	
2.4 Hazard identification and safety risk assessment (Chapter 4.2)	
2.5 Management of safety risks (CE-8) (Chapters 2.4 & 3.4)	
3. State Safety Assurance	[Annex 19 Chapter 3.4]
3.1 Surveillance obligations (CE-7) (Chapter 4.1)	
3.2 State safety performance (Chapter 2.2.5-6, 3.4, 4.1 & 4.2.3)	
4. State Safety Promotion	[Annex 19 Chapter 3.5]
4.1 Internal training, communication and dissemination of safety information (Chapter 4.2.4 & 5.1)	
4.2 External training, communication and dissemination of safety information (Chapter 4.2.4 & 5.2)	

¹ The 2nd Edition of Annex 19 has integrated eight critical elements (i.e. CE-1 to CE-8) of a State safety oversight system in Appendix 1 of the previous edition.

AMENDMENT HISTORY

Edition	Reference(s)	Subject(s)/Major Change	Date
1 st Issue	SMM 1 st Edition	An SSP for Hong Kong was developed with reference to relevant ICAO SARPs for implementation by aviation authorities within CAD.	Jan 2009
2 nd Issue	Annex 19 1 st Edition ICAO SMM 3 rd Edition	Programme renamed as “Hong Kong Safety Programme” and contents aligned with 1 st edition of the ICAO Annex 19 which became applicable on 14 November 2013, and other relevant reference in the 3 rd edition of the ICAO SMM, such as :- i) Safety Policy aligned with ICAO; ii) Programme structure aligned with the table of contents in the ICAO SMM as appropriate.	Oct 2014
3 rd Issue	Annex 19 2 nd Edition	Programme renamed as “Hong Kong Aviation Safety Programme”. Contents aligned with 2 nd edition of the Annex 19.	May 2018
2022-2026	Annex 19 2 nd edition SMM 4 th Edition GASP 2023-2025 Edition AP-RASP 2023-2025 Edition ICAO Doc 10131	Reflect the goals and strategies including mitigation of HRCs in the 2023-2025 edition of ICAO GASP and AP-RASP. Transfer SSP Implementation Plan to the Hong Kong Aviation Safety Roadmap in ICAO format. Further alignment with ICAO Annex 19 and SMM. Updates relating to the AAIA and CASC.	November 2023

ABBREVIATIONS / DEFINITIONS

AAIA	Air Accident Investigation Authority
AESD	Air Traffic Engineering Services Division
AMO	Airport Meteorological Office of the Hong Kong Observatory
AN(HK)O	Air Navigation (Hong Kong) Order 1995
ANS	Air Navigation Services
ANSP	Air Navigation Service Provider
AP-RASP	Asia-Pacific Regional Aviation Safety Plan
APSD	Airport Standards Division
APSS	Airport Sub-sections
ASMD	Air Services and Safety Management Division
ATMD	Air Traffic Management Division
ATMSO	Air Traffic Management Standards Office
ATS	Air Traffic Service
AWO	Airworthiness Office
CAD	Hong Kong Civil Aviation Department
CASC	CAD Aviation Safety Committee
CMA	Continuous Monitoring Approach
CNS	Communications, Navigation and Surveillance
DGCA	Director-General of Civil Aviation
DGO	Dangerous Goods Office
FSAD	Flight Standards and Airworthiness Division
FSO	Flight Standards Office
GASP	Global Aviation Safety Plan
HKIA	Hong Kong International Airport
HK AIP	Hong Kong Aeronautical Information Publication
HKO	Hong Kong Observatory
HKSARG	Government of the Hong Kong Special Administrative Region
ICAO	International Civil Aviation Organization
IGA	International general aviation
MET	Meteorological
NASP	National Aviation Safety Plan
PELO	Personnel Licensing Office
SARPs	Standards and Recommended Practices
SMS	Safety Management System
SMM	Safety Management Manual (Doc 9859)
SRSS	Safety Regulation Sub-sections
SSO	Strategic Safety Office
SSP	State Safety Programme
SSPIC	State Safety Programme Implementation Committee

Definition

In this document, where a term is used which is defined in a relevant Annex to the Convention on International Civil Aviation or documents published by the International Civil Aviation Organization (ICAO), that definition will apply unless:-

- a) There is a different definition in the Civil Aviation Ordinance (Cap. 448) and its subsidiary legislation or other legislation of Hong Kong; or
- b) Differences to ICAO definitions are identified in GEN 1.7 of Hong Kong Aeronautical Information Publication (HK AIP).

CHAPTER 1

Hong Kong Aviation Regulatory System

1.1 Safety Management and Regulatory Responsibilities

Hong Kong adopts the international safety standards laid down by the ICAO where applicable for the safety regulation and safety management of our aviation system. In this connection, the Chief Executive of Government of the Hong Kong Special Administrative Region (HKSARG), by virtue of delegation of powers, has authorised the Director-General of Civil Aviation (DGCA) to exercise any powers² or perform any duties under the Air Navigation (Hong Kong) Order [AN(HK)O]. Such authorisation provides the CAD with the authority and powers to conduct safety oversight on our aviation system.

The CAD, established as a government department under the Transport and Logistics Bureau, has been designated to the ICAO as the primary aviation regulatory authority of Hong Kong, China as well as the authority in the provision of air navigation services. The Hong Kong Observatory (HKO) is the designated meteorological (MET) authority of Hong Kong, China to the ICAO and is responsible for the regulation of aviation meteorological services. The Air Accident Investigation Authority (AAIA) is the designated accident investigation authority of Hong Kong, China to the ICAO.

The structure and organisation chart of the existing aviation regulatory framework from the top level is shown at [Attachment A](#). Individual authorities' safety regulatory/management responsibilities are described in [Table 2](#).

² Except the power to make regulations

Table 2 – Area of authority of regulatory / aviation authorities

Area	Regulatory Authorities / Aviation Authorities	
Annex 1	PELO/FSAD	- Medical certification and assessments, licensing of pilots and maintenance engineers
	ATMSO/ASMD	- Licensing of air traffic controllers / approval of ATC training
	FSO /FSAD	- Approval of flight training
	AWO/FSAD	- Approval of maintenance training
Annex 3	HKO	- MET Authority & Regulator
Annex 6	FSO/FSAD	- Certification of Hong Kong Air Operator’s Certificate
	AWO/FSAD	- Approval of maintenance arrangements/organisations
Annex 8	AWO/FSAD	- Airworthiness certification and related matters
Annex 11	ATMSO/ASMD	- Safety oversight on air navigation services
Annex 13	AAIA	- Civil aircraft accidents and incidents investigations
Annex 14	APSS/APSD	- Safety regulation of aerodrome operations
Annex 18	DGO/APSD	- Regulation of air transport of dangerous goods
Annex 19	SSO/ASMD	- SSP implementation and coordination
	CAD/HKO/AAIA	- SSP implementation
ATS	ATMD	- Authority in the provision of air traffic services (ATS)
CNS	AESD	- Authority in the provision of communications, navigation and surveillance (CNS) services

CHAPTER 2

State Safety Policy, Objectives and Resources

2.1 Hong Kong Safety Legislative Framework

Pursuant to the Chicago Convention³, Hong Kong has promulgated a legislative framework, operating regulations and guidance materials that define how aviation safety is managed in compliance with the international and local standards. Enforcement provisions are prescribed for the prosecution, or the suspension or revocation of certificates or licences issued by the CAD.

The safety legislative framework, operating regulations, guidance materials and implementation policies are periodically reviewed to ensure that they remain relevant and applicable to Hong Kong.

2.1.1 Primary Aviation Legislation

In Hong Kong, the primary legislation dealing with civil aviation matters is in the Civil Aviation Ordinance (Cap. 448). There is other legislation⁴ enacted to regulate aviation activities such as the Dangerous Goods (Consignment by Air) (Safety) Ordinance (Cap. 384).

By delegation of powers from DGCA, certain authorised officers of CAD have the right of access to aircraft and aviation facilities, personnel, and are empowered under the respective law to access and inspect aviation documents of individuals and organisations performing an aviation activity.

2.1.2 Specific Operating Regulations

Under Cap. 448, subsidiary legislation includes the AN(HK)O which contains provisions for the safety regulation of aviation activities, and the Hong Kong Civil Aviation (Investigation of Accidents) Regulations for the investigation of aircraft accidents and incidents.

There is other subsidiary legislation⁴, such as the Dangerous Goods (Consignment by Air) (Safety) Regulations (Cap. 384A) which controls, in the interests of safety, the preparation, packing, marking, labelling and offering of dangerous goods for carriage by air.

³ Convention on International Civil Aviation (<https://www.icao.int/publications/pages/doc7300.aspx>)

⁴ A comprehensive list is in the internal CAD Exposition Appendices V - VI.

2.1.3 Operating Requirements

The CAD also promulgates regulatory requirements and technical guidance to outline the standards required to be demonstrated by the applicants in order to support the grant of licence, approval or certificate, or guidance to facilitate compliance with the legislation. Examples are in [Table 3](#).

Table 3 – Examples of regulatory requirements and technical guidance

ALRD	:	Aerodrome Licensing Requirements Document
ALRD(H)	:	Aerodrome Licensing Requirements Document (Heliport)
CAD 360	:	Air Operator’s Certificates Requirements Document
CAD 54	:	Requirements Document for Pilot Licences and Associated Ratings
CAD 670	:	Air Navigation Services Safety Requirements
CAD 382	:	The Mandatory Occurrence Reporting Scheme
CAD 712	:	SMS for Air Operators and Maintenance Organisations
CAD 361	:	International Non-Public Transport Operations
HKAR-145	:	Approved Maintenance Organisations
HK AIP	:	Hong Kong Aeronautical Information Publication

2.1.4 Guidance Documents

Safety materials, technical guidance and safety-critical information will be promulgated by the CAD as appropriate.

2.1.5 Civil Aviation Authority’s Framework and Accountabilities

Under Cap. 448, the Chief Executive in Council may make provisions for carrying out the Chicago Convention and any Annexes relating to international safety standards, and for regulating air navigation. Responsibilities of the CAD include the implementation of the ICAO safety standards, development of airspace policy and provision of necessary infrastructure to support air navigation services. The Organisation Chart of CAD is shown at [Attachment A1](#). Functions are elaborated in CAD website and CAD Exposition.

As the primary regulatory agency of civil aviation in Hong Kong, it is incumbent upon the CAD to undertake the SSP responsibilities of Hong Kong. The CAD may issue licences, certificates and approvals and conduct safety oversight on the civil aviation system under the AN(HK)O. To conduct continued surveillance, inspections or safety audits, CAD’s personnel are empowered by the DGCA, through proper delegation of authority, to discharge duties under the law.

2.1.6 Framework/Regulations Review

Hong Kong will comply with ICAO's Standards and Recommended Practices (SARPs) wherever possible and applicable. To this end, new international standards will be incorporated and reflected in the legislation, operating regulations/requirements as appropriate in a timely and effective manner. Where adoption of ICAO provisions is not practicable, differences will be filed to ICAO and published in the HK AIP.

When ICAO standards cannot be effectively implemented by administrative measures, the CAD in conjunction with our policy bureau will seek legislative provisions⁵ in accordance with the guidance⁶ of the Department of Justice, which plays a significant role in the legal system of Hong Kong.

2.1.7 SSP Documentation and Records

The CAD applies HKSARG's filing system for the appropriate storage, archiving, protection and retrieval of all documents related to SSP activities. Confidential materials are subject to more stringent filing requirements. A sound documentation system facilitates the traceability of documents and records for update, reference or review by authorised CAD staff.

2.2 Safety Responsibilities and Accountabilities

2.2.1 SSP Development

In 2009, the 1st edition of SSP for Hong Kong was issued. The primary responsibility for the SSP rests with the DGCA. An SSP Team was formed to initiate the implementation work. In 2013, subsequent to a new **Annex 19 – Safety Management** developed by the ICAO, the level of SSP implementation activities was stepped up. The CAD Aviation Safety Committee (CASC) and SSP Implementation Committee (SSPIC) were appointed by the DGCA in 2012 to implement those initiatives.

SSP gap analysis exercises were periodically conducted in accordance with the ICAO Safety Management Manual. By 2017, the SSP was fully implemented after all respective gaps were closed. The CAD has put in place risk-based regulatory elements in our safety oversight system. We will conduct gap analysis as required with a view to further strengthening this Programme as well as our risk-based decision-making process so that safety efforts can be focused on hazards posing greater risks.

⁵ CAD's internal procedures for legislative review are in Section 5.5 of ASMD Exposition.

⁶ In Department of Justice's "How Legislation is Made in Hong Kong" Appendix 3 - HKSAR General Regulations Chapter V, government bureaux or departments should not seek legislative provision for matters that can be dealt with administratively.

At a global and regional level, the ICAO periodically updates the global and regional roadmaps for the continuous improvement of aviation safety. In the 2023-2025 Edition of Global Aviation Safety Plan (GASP) and Asia-Pacific Regional Aviation Safety Plan (AP-RASP), the ICAO has identified high-risk categories of occurrences (HRCs), which are Loss of Control In-flight (LOC-I), Controlled Flight into Terrain (CFIT), Mid-air Collisions (MAC), Runway Excursion (RE), Runway Incursion (RI) and Abnormal Runway Contact (ARC), for risk management by Regions, authorities and industry.

As our commitment to proactively align with the ICAO safety strategies and implement risk-based regulations, those HRCs and safety initiatives, alongside local safety issues have been considered in the safety review processes under this Programme, and reflected in Hong Kong Aviation Safety Roadmap in the Hong Kong Aviation Safety Plan, which is part of the SSP documentation developed pursuant to ICAO's National Aviation Safety Plan (NASP)⁷ template for follow up by the respective aviation authority with the concerned stakeholders.

2.2.2 SSP Responsibilities and Resources

The DGCA is accountable and has the authority for the implementation and maintenance of SSP in Hong Kong, as well as the authority on service provider certification and CAD's safety oversight processes. The Strategic Safety Office (SSO) was established in 2013 to assist the DGCA in SSP coordination matters.

For the implementation of SSP, the DGCA has full control of human resources and financial resources related to the CAD. He may initiate requests to acquire additional resources through the established mechanism within the HKSARG as described in CAD Exposition.

The CAD also established requirements for the qualification of technical personnel. There are processes in place to review training gaps and allocate resources to Divisions at the beginning of each financial year for staff development purposes, including maintenance and enhancement of staffs' competence, updating their technical knowledge, and acquiring additional professional skills.

Arrangements for ensuring competence of those personnel in discharging safety related functions are outlined in the internal manuals of the respective Divisions.

⁷ The ICAO GASP encouraged States/Administrations to develop NASP and align the targets and safety actions with GASP and RASP to continually reduce HRCs, thus fatality risks. Further information on the background of NASP can be found in Hong Kong Aviation Safety Plan.

2.2.3 Hong Kong SSP Coordination/ Implementation

The SSPIC assists the DGCA and CASC in driving the SSP implementation and development. It serves as an ongoing SSP coordination platform among the DGCA, CASC, CAD management, AAIA and HKO for the maintenance, activity monitoring and continuous improvement of SSP. The SSPIC comprises regulatory and safety management personnel from CAD and other subject matter experts from AAIA and HKO as required to assist in the review of the implementation of SSP activities in Hong Kong under the policy steer of CASC, with high level membership of CAD Directorates. The CASC reviews and provides strategic policy steers to SSPIC and Divisions regarding the safety oversight of the Hong Kong aviation industry, giving priorities to ICAO safety objectives including SSP implementation. While all divisional and departmental management maintain oversight of their respective operational responsibilities, the CASC considers the overall safety performance at strategic levels and steers as needed to maintain or further enhance SSP. The coordination mechanism is outlined in [Attachment A1](#).

2.2.4 Aviation Safety Policy

To achieve a high level of safety, the CAD has developed a high-level safety statement at [Appendix 1](#) that is applicable across Hong Kong's aviation regulatory framework.

2.2.5 Safety Performance Indicators of Hong Kong

Hong Kong has established indicators to measure safety performance of civil aviation system, as shown at [Appendix 2](#). Safety performance indicators facilitate the ongoing safety performance measurement and monitoring by the DGCA and the SSPIC Committee. Details of indicators are in the Hong Kong Aviation Safety Plan.

2.2.6 SSP Improvement/Review

With the full implementation of the Hong Kong SSP in 2017, the CAD upholds the effectiveness of SSP Components 2 and 3, in particular the periodic review of service providers' safety performance and the hazard identification and safety risk assessment processes detailed in Chapter 4.2, given that the data collection, analysis and risk management capabilities will drive the identification of operational risks and safety intelligence conducive to the development of safety enhancement actions. The CAD will continue to strengthen the safety oversight functions to address high risk areas based on available safety information, including local issues or regional and global HRCs risks in the ICAO GASP and AP-RASP.

Also, the SSP and the safety policy are periodically evaluated by the CAD in collaboration with HKO and AAIA with the aim of continuing the Programme's effectiveness, and maintaining or further improving the overall level of safety performance of Hong Kong's aviation system.

2.3 Accident and Incident Investigation

Hong Kong has designated the AAIA as the accident investigation authority to the ICAO. The AAIA plays an essential role in the prevention of accidents and incidents, thus supporting the management of aviation safety in Hong Kong. Established in 2018, the AAIA is an independent Authority formed in accordance with ICAO Annex 13 - Aircraft Accident and Incident Investigation to ensure the independence and impartiality of investigations. The Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Cap. 448B) was amended accordingly in 2017.

Cap. 448B contains provisions for the appointment of the Chief Inspector and the inspectors, and provide appropriate powers for those inspectors to conduct independent investigations to accidents and incidents involving civil aircraft. The sole objective of investigations is the prevention of accidents and incidents, and not the apportioning of blame or liability.

All inspectors are vested with the appropriate investigation authority. They are obliged to carry out investigations in a professional and fair manner, and are required to be entirely independent and free from interference from other parties during the investigation⁸.

2.4 Enforcement Policy

2.4.1 Considerations

According to the Chicago Convention Article 12, States/Administrations should implement and enforce the ICAO SARPs to ensure that every aircraft flying within its territory, or aircraft carrying its nationality mark wherever it may operate will comply with the applicable regulations.

To this end, the CAD conducts enforcement actions according to the established internal policy and procedures. Where appropriate, enforcement actions will be taken, ranging from licensing actions to prosecution.

Various licences or certificates are issued pursuant to the AN(HK)O by the CAD, for example, licences issued to the pilots or certificates issued to the aircraft operators. Validity of licences or certificates is subject to the continued compliance with the conditions set out by the CAD. With sufficient ground, the CAD may exercise powers under the Order to revoke, suspend or vary any certificate or licence if it is no longer satisfied that the licensing or certification requirements are met.

⁸ Procedures are in AAIA's internal Exposition and Investigation Handbook, and are published as appropriate vide AAIA Circulars on the AAIA Website.

Not all infringements constitute an offence and warrant prosecution. In the event that gross negligence, wilful infringement or deviations from legal requirements are suspected, the matter will be investigated, and referred to the Department of Justice as appropriate. The decision on whether to prosecute rests with the Department of Justice which has the ultimate authority and responsibility on prosecution matters in Hong Kong, according to their Prosecution Code.

2.4.2 Specific Policies for Safety Management System (SMS)

Within the spirit and context of SMS, internal investigations and rectification by the service provider concerned, whose SMS has been accepted by the CAD under Article 102 of the AN(HK)O may be allowed subject to the agreement and satisfaction of the CAD.

Without prejudice to the decision of the Department of Justice, no proceedings should be recommended to be instituted in respect of unpremeditated or inadvertent breaches of the law, except in cases involving gross negligence or wilful infringement. Such principle applies to reports made under mandatory report, voluntary report, or safety information related to the operation of an SMS.

CHAPTER 3

State Safety Risk Management

3.1 Safety Requirements for SMS

Hong Kong has established harmonised regulations in Article 102 of the AN(HK)O, and regulatory requirements to mandate service providers specified in ICAO Annex 19 to implement an SMS. Acceptance by the CAD is required. The Regulations also require service providers to identify hazards and manage safety risks.

SMS are required to be established in accordance with the SMS framework in Appendix 2 of Annex 19 and be commensurate with the size of individual service provider and complexity of its aviation products or services.

As part of the SSP gap analysis, regulations and regulatory requirements across disciplines were periodically reviewed. The SMS requirements for approved training organisations and International general aviation operators will be included in the AN(HK)O. The CAD will also update regulatory requirements as required to ensure they remain relevant and appropriate to the service providers.

3.1.1 Air Operator and Maintenance Organisation

For a Hong Kong air operator or approved maintenance organisation which conducts or provides services in accordance with Annex 6, its SMS must be accepted by the CAD as meeting the requirements promulgated by the Flight Standards and Airworthiness Division (FSAD) in CAD 712 – SMS for Air Operators, International Non-Public Transport Operators, Maintenance Organisations and Flying Training Organisations - A Guide to Implementation.

3.1.2 Type Design / Manufacture Organisation of Aircraft, Engines or Propellers

There is no type design / manufacture organisation of aircraft, engines or propellers in Hong Kong.

3.1.3 Aerodrome Operator

Based on the ICAO standards, the SMS of the operator of the aerodrome certified in accordance with Annex 14 has been accepted by the CAD. Detailed requirements are stipulated in Chapter 13 of the Aerodrome Licensing Requirements Document (ALRD) by the Airport Sub-sections (APSS) of the Airport Standards Division (APSD).

3.1.4 Air Navigation Services Provider

The Air Traffic Management Division (ATMD) and the Air Traffic Engineering Services Division (AESD) of CAD are the air navigation service providers (ANSP) in Hong Kong. The SMS established by the ANSP has been made acceptable to the Air Traffic Management Standards Office (ATMSO), according to SMS requirements promulgated in CAD 670 – Air Navigation Services Safety Requirements.

3.1.5 Approved Training Organisation

If exposed to safety risks related to aircraft operations during the provision of services, an organisation, in accordance with Annex 1, approved by the CAD which offers integrated training to flight crew or air traffic controllers is required to have an SMS accepted by the CAD. SMS acceptance requirements for CPL and MPL training are promulgated by FSAD in CAD 590(A) and CAD 590 (MPL) respectively. The Training Unit of ATMD is approved by CAD as an approved training organisation. The SMS of ATMD has been accepted by ATMSO in accordance with the SMS requirements for ANSPs stipulated in CAD 670.

3.1.6 Other Service Sector - International General Aviation (IGA)

The CAD has established criteria with reference to Annex 19 for IGA operators of large or turbojet aeroplanes certified in Hong Kong to implement an SMS. The operator's SMS shall be appropriate to the size and complexity of the operations and meet the regulatory requirements prescribed in CAD 361 - International Non-Public Transport Operations.

3.2 Agreement and Management of Safety Performance

As part of the acceptance process of SMS, the proposed safety performance (i.e. safety performance indicators and associated target/alert settings) by service providers and IGA operators will be reviewed and accepted by the relevant regulatory authorities. For new applicants, the CAD may accept a SMS implementation plan in phases, and allow the safety performance indicators to be developed and accepted at a later stage.

For continuous monitoring purposes, the CAD may periodically review each organisation's safety performance indicators and associated target and alert settings to ensure they remain effective, relevant and appropriate to the service provider. The CAD's agreement of the organisation's safety performance will take into account the scope, size, nature and complexity of individual organisation's specific operational context and activities.

Such agreement process may lead to certain safety assessments or risk mitigation actions to be carried out by the organisation, if specific risks are manifested in the organisation's data, or other industrial, regional or global safety data. The frequency of review by CAD may vary across disciplines. The CAD is aiming to align regulatory practices in a more consistent manner, with reference to the ICAO guidance.

3.3 Periodic Assessment of SMS

The SMS of individual service providers and IGA operators will be periodically assessed by the CAD to ensure that they remain relevant and appropriate to the organisations.

3.4 Management of Safety Risks

The CAD has established a mechanism for the management of safety risks including the evaluation of effectiveness of actions taken, and the resolution of safety issues so identified. Safety actions, including but not limited to those taken by service providers, need to be documented and monitored to ensure that identified safety issues are addressed in a timely manner. Electronic tools are used, as appropriate, to assist in the monitoring and tracking of actions.

3.5 Safety Management Principles for Medical Assessment

The CAD will apply the basic safety management principles to the medical assessment process of licenced aviation personnel, that as a minimum include:

- a) routine analysis of in-flight incapacitation events and medical findings during medical assessments to identify areas of increased medical risk; and
- b) continuous re-evaluation of the medical assessment process to concentrate on identified areas of increased medical risk.

CHAPTER 4

State Safety Assurance

4.1 Safety Oversight

Hong Kong has implemented a safety oversight system in accordance with Appendix 1 of ICAO Annex 19. All aviation authorities are provided with adequate financial resources for the management of aviation safety and are supported by sufficient and qualified personnel. Stated safety functions and objectives, guidance to address conducts and avoidance of conflicts of interests are provided to personnel performing safety oversight functions. Details are in Chapter 2.2.2.

Furthermore, technical guidance, tools and provision of safety-critical information are also provided for technical personnel. Appropriate facilities, comprehensive and up-to-date guidance and procedures as well as tools, equipment and transportation means, as applicable, will be provided by each authority to enable their personnel to perform safety oversight functions effectively and in a standardized manner. Technical guidance for implementing regulations is also provided to the aviation industry as outlined in Chapter 2.1.

The CAD has established its own surveillance programme and procedures to ensure ongoing compliance with regulatory requirements by service providers, IGA operators, or other aviation licence/certificate/approval holders, including personnel designated by CAD to perform safety oversight functions on CAD's behalf. The HKO has also established and implemented a safety oversight system for monitoring the compliance of aviation meteorological services.

The surveillance programme may include planned inspections, audits, and any other monitoring activities, including the organisations' SMS. Individual programmes will be maintained up-to-date. The CAD will periodically review the safety performance of individual service providers and continue to refine the data-driven risk-based approach to surveillance taking into account ICAO's safety management guidance. Regulatory resources may be prioritised according to areas of greater safety concern or need.

4.1.1 Certification, Approval and Licensing System

The Chicago Convention requires each Contracting State to issue licences and certificates for its aircraft, organisations and personnel engaged in international air navigation. In this connection, the CAD has implemented documented processes to ensure that the aviation personnel and organisations meet the required standards before they are allowed to exercise the privileges of licences or certificates. Ongoing surveillance is conducted, and enforcement actions, ranging from warning letters to prosecution, may be taken as required.

4.1.2 Safety Oversight of Service Providers and IGA Operators

The CAD's safety oversight system and obligations include the initial approval and continued surveillance of aviation service providers and IGA operators to assure compliance with Hong Kong's legislation and regulatory requirements. The safety oversight and surveillance procedures will be maintained up-to-date by individual regulatory authorities.

4.1.3 Internal SSP Review/Quality Assurance

The SSP implementation is coordinated by the SSPIC Committee under the policy steer of CASC Committee which meet as required. The two committees complement each other on the strategic and operational aspects of SSP improvement and maintenance including the review of safety performance. Both Committees' activities include the review of SSP and its safety policy to assure continuing and effective conformance of the SSP and its related safety oversight functions; as well as to drive the continuing improvement of the SSP in accordance with the objectives stated in the Safety Policy Statement in [Appendix 1](#).

CAD and HKO maintains an internal quality system and management oversight on its activities and personnel. In addition, each authority maintains a periodic review process based on the ICAO Continuous Monitoring Approach (CMA) to ensure ongoing alignment with ICAO SARPs as appropriate.

4.1.4 External SSP Review/Audit

The Air Navigation Services (ANS) sector has established an external review process for some SSP activities. The Air Traffic Safety Assessment Committee chaired by the CAD includes members from major local air operators. The committee meets twice a year to review ANS safety matters including risk assessments of ANS occurrences and ANS safety performance.

Following the launch of the CMA audit by ICAO in 2013, SSP activities of Hong Kong are subject to the continuous external audit by the ICAO.

4.2 Safety Information Protection, Safety Assessment and Sharing

To ensure continued availability of safety data and information to support safety management activities, the CAD, through the Strategic Safety Office (SSO), has established mechanisms to capture, protect and store safety data / safety information from the regulatory and aviation authorities, and to consolidate, analyse and evaluate those data at the aggregate level⁹ to enable hazards to be identified from collected data, and assessment of safety risks associated with identified hazards to be conducted.

⁹ Details of the safety data collection and processing system (SDCPS) are in CAD's Safety Management Exposition.

The CAD may derive information from the stored data, and will progressively develop arrangements for the active exchange of safety information with service providers or other States as appropriate. Safety databases may use standardized taxonomy where applicable, for example, ICAO's Accident/Incident Data Reporting (ADREP)-compatible system, to facilitate safety information sharing and exchange.

4.2.1 Safety Reporting System

The CAD and AAIA maintains their respective mandatory reporting systems to facilitate the collection of information on actual or potential safety deficiencies. The system includes any mandatory reporting scheme prescribed by law or regulatory arrangements below.

Accident Reporting Scheme

Legal requirements to report aircraft accidents and serious incidents are prescribed in the Hong Kong Civil Aviation (Investigation of Accidents) Regulations (Cap. 448B). Reporting guidance is published by the AAIA in [Circular 01/2019 - Duty to Report Aircraft Accidents and Serious Incidents](#).

Mandatory Occurrence Reporting Scheme

Requirements for aviation personnel, operators and service providers to submit Mandatory Occurrence Reports (MOR) are prescribed in Article 86 of the AN(HK)O. Relevant guidance on the reporting, processing and investigation system is set out in CAD 382 - The Mandatory Occurrence Reporting Scheme. While the MOR database is managed by FSAD, occurrences are reviewed and subject to risk assessment as appropriate by relevant regulators.

Other Regulatory Required Reporting

Other safety data collection processes established by regulatory arrangements between the regulatory Divisions and service providers include the following :-

- a) Special occurrences or safety data of the Hong Kong International Airport (HKIA); and
- b) Safety performance data of ATS, CNS and HKIA.

4.2.2 Voluntary/Confidential Reporting System

Hong Kong has established a voluntary safety reporting system to facilitate the collection of information on actual or potential safety deficiencies that may not be captured by the mandatory incident reporting system. For example, CAD has enabled voluntary reports to be submitted under [DCA201 Occurrence Report Form](#) in CAD 382.

The AAIA developed a Voluntary Incident Reporting System (VIR) and the [Voluntary Incident Reporting Form \(AAIA-02\)](#) to capture information other than that of accidents, serious incidents or mandatory reports for the purpose of promoting accident prevention and enhancing aviation safety. The source of information will not be disclosed unless required to do so by law, or authorised by the person concerned.

The non-disclosure arrangement also applies to any voluntary or confidential reports¹⁰ received by individual regulatory or investigation authorities. Those reports may be evaluated to verify their validity.

4.2.3 Safety Data and Safety Information Analysis

The CAD, HKO and AAIA have established and maintained safety database(s)¹¹ and related processes to identify hazards and to facilitate the effective analysis of information on actual or potential safety deficiencies / hazards identified. Relevant safety data, information, reports, including safety recommendations or reports issued by the accident investigation authorities where applicable, are assessed to determine if any actions will be required for the enhancement of safety, or any preventive actions needed to address actual or potential safety deficiencies.

In addition, a holistic review and analysis mechanism with related processes has been maintained by the CAD to analyse the measured safety performance against the established safety performance indicators in Chapter 2.2.5, and safety data/information from SDCPS and associated safety databases with a view to identifying hazards. The mechanism also assesses safety risks associated with those identified hazards and evaluates effectiveness of safety actions. Multi-disciplinary safety performance reviews are regularly carried out with regulatory offices/ aviation authorities. Such review may identify safety concerns or hazards based on data, which enabled impacts or consequences to be assessed, and actions to be identified. The progress of implementation plans and the effectiveness of actions taken to manage safety risks and resolve safety issues are evaluated periodically. The CAD will continue to refine the processes and review the tools to assist in the monitoring and tracking of progress of the implementation of actions and the effectiveness of responses.

¹⁰ Confidential reports are not anonymous reports.

¹¹ ICAO ADREP-compatible taxonomy should be used where possible to facilitate data exchange.

4.2.4 Safety Information Sharing and Exchange

Exchange within Hong Kong

Authorities responsible for the implementation of the SSP, including the SSO and AAIA, may have access to appropriate information in mandatory or voluntary reports, subject to the safety data protection principles in ICAO Annex 19, to support their safety responsibilities. The integration of safety data enables safety performance measurement to be conducted on the aviation system of Hong Kong.

Sharing with Other States or ICAO

If safety matters of interest to other States or ICAO are identified during the analysis of safety information contained in CAD or AAIA's database, for example, critical aircraft defects or substandard safety performance of non-Hong Kong operators, ANSPs or aerodromes, the CAD or AAIA may forward such information to those States/Administrations without delay. Prior to sharing such information, agreement of the concerned authorities will be sought regarding the level of protection and conditions on which safety information will be shared, which will be in line with the safety data protection principles in Annex 19.

Other Safety Information Sharing and Exchange

The CAD encourages the establishment of safety information sharing or exchange networks among users of the aviation system and facilitate the sharing or exchange of information on actual and potential safety deficiencies. Safety information derived from databases has been disseminated to industries or States as required, for example, the ANSP safety newsletter. More systematic information sharing or exchange arrangements may be developed as SSPs are fully implemented worldwide, or GASP Goal 5 as elaborated in paragraph 4.3 is realised.

4.2.5 Safety Data and Safety Information Protection

To foster a positive safety culture and to encourage safety reporting, safety data captured and safety information derived from a mandatory or voluntary safety reporting system or related sources shall be non-punitive and be afforded protection. The CAD and the AAIA will not make available or use safety data or safety information or reports in the mandatory or voluntary system for purposes other than maintaining or improving aviation safety, unless exceptionally, an appropriate authority such as the judicial authority of Hong Kong determines in accordance with the legislation of Hong Kong, or the principles of exception in Appendix 3 of Annex 19, for example, the release of such data or information is necessary for maintaining or improving safety, and that the benefits of their release outweigh the adverse impact such release is likely to have on the future collection and availability of safety data and safety information.

Notwithstanding the above-mentioned protection or principle of exceptions, authorities of HKSARG may use safety data or safety information to take preventive, corrective or remedial action that is necessary to maintain or improve aviation safety. The CAD will review the efficacy of safety information protection in Hong Kong to facilitate and promote safety reporting, applying the principles specified in Annex 19.

4.3 Safety Data-Driven / Risk-Based Surveillance

The conventional approach for safety oversight, surveillance or inspection programmes tends to be consistently applied to every service provider in the same manner, with no mechanism for customising the frequency or scope of surveillance activities. Such an approach is no longer adequate for managing air traffic growth, nor addressing emerging safety risks of an increasingly complex future air navigation system. Therefore, the CAD will continue to implement the global safety strategies appropriately in collaboration with the aviation community.

The 2023-2025 edition of ICAO GASP establishes six Safety Goals. For example, Goal 3 requires all States to implement effective SSPs in phases, such that all States must implement a foundation of SSP by 2023, and ultimately, an effective SSP by 2028. To this end, the CAD has fully implemented the SSP in 2017.

In Hong Kong, a risk-based oversight system has been implemented by the CAD with procedures¹² established to prioritise inspections, audits and surveys towards those areas of greater safety concern or need, based on the assessed safety risks from the prevailing safety information. The ICAO global and regional safety information and HRCs, or those published by major authorities and international organisations may also serve as inputs to our system.

The CAD will continue to refine these procedures and practices applicable to all service sectors. Our goal is to maintain an effective compliance-based and performance-based regulatory system where required, with a robust risk-based and an effective data-driven decision-making process which allows us to focus safety efforts on hazards posing greater risks. Goal 5 of GASP directs the expanded use of industry programmes and safety information sharing networks by service providers, and sets out related indicators to track the usage of globally harmonized metrics by service providers. In this connection, the Hong Kong Aviation Safety Plan has established a related target to track ICAO's development on guidance relating to industry safety indicators. It is anticipated that there will be increasing collaboration with industries and study of safety information exchange and development of safety intelligence, as safety data is the quintessence of risk-based regulatory approach.

¹² Risk-based surveillance is established for the oversight of Hong Kong air operators, approved maintenance organisation, ANSP, aerodrome operator, flight training organisation, IGA operator, aeromedical assessment on aviation personnel as well as non-Hong Kong operators.

CHAPTER 5

State Safety Promotion

5.1 Internal Communication and Dissemination of Safety Information

Hong Kong's safety promotion involves the establishment of internal processes to provide or facilitate safety training, communication and dissemination of safety information. Exchange of safety intelligence and safety information as well as sharing of this Programme amongst aviation authorities and stakeholders as detailed in Chapter 4.2.4 supports the development of a positive safety culture and fosters an effective SSP.

5.1.1 Internal SSP, SMS and Safety Training

The CAD has a long-established mechanism for Divisional management to ensure organisational as well as individual competence of their personnel in discharging safety oversight or safety management duties. The departmental training programme is prepared every fiscal year and is updated as required. Safety management training or workshop is arranged for staff.

CAD aims at arranging training on SSP Implementation on a regular basis and has developed processes to identify SSP/SMS training needs and arrange competency-based training for staff as required.

5.1.2 Internal Communication and Dissemination of Safety Information

Hong Kong has developed a mechanism for the consolidation of safety information by the SSO of the CAD. The Hong Kong SSP documentation, safety/enforcement policies and procedures and safety data consolidated from all aviation sectors are shared among regulatory and aviation authorities.

In 2016, an electronic CAD Safety Library System was launched to facilitate the promulgation of guidance to CAD personnel and to promote learning through user-friendly document subscription features.

5.2 External Communication and Dissemination of Safety Information

The CAD has facilitated external safety promotion by promoting awareness of safety risks and facilitating the sharing and exchange of safety information and safety intelligence with the aviation community. We will continue to do so as we believe it will foster and support the development of a positive safety culture which will be conducive to the maintenance and improvement of safety.

5.2.1 Safety Seminars

The CAD organises safety seminars and conferences to facilitate learning and information sharing with the industry. The CAD also actively participates in ICAO regional and global meetings or conferences, and will facilitate industries' participation in those safety forums. We will continue to support continuous SMS training or SSP familiarisation with Hong Kong's service providers.

5.2.2 Exchange and Sharing of Safety Information

The CAD will continue to strengthen our partnership with the industry in promoting a safety culture and experience sharing on safety management issues. In 2013, a public Aviation Education Path to promote interests in aviation, especially amongst students and our younger generation, was launched by the CAD with assistance from the industry, which echoes ICAO's initiatives in the Next Generation of Aviation Professionals (NGAP). External safety promotion with Hong Kong's industry will be arranged more regularly.

In 2016, CAD began to issue "Safety Links" newsletter to foster a positive safety culture and to promote safety information sharing with the aviation community. The CAD will continue to align with the international practice on dissemination of SSP related documents and sharing of safety information with service providers and other aviation authorities, to support the maintenance and improvement of SSPs both locally and globally.

5.3 Future Work

CAD will continue to maintain and enhance the following :-

- a) disseminate regulatory information and communicate SSP/SMS-related or safety information to the industry;
- b) continue to promulgate up-to-date SMS implementation guidance;
- c) continue to communicate safety related issues, safety policies and procedures through publications or websites as appropriate; and
- d) promote the sharing and exchange of safety information and safety intelligence with and amongst different sectors of the aviation community and other States.

APPENDIX 1

Safety Policy Statement (See Chapter 2.2.4)

The Civil Aviation Department of Hong Kong promotes and regulates the safety of aviation in Hong Kong, China. We are committed to developing and implementing effective strategies, regulatory frameworks and processes to ensure that aviation activities under our oversight achieve the highest practicable level of safety.

To this end we will:

- 1) set safety standards that are in line with the Standards, Recommended Practices and Procedures of the International Civil Aviation Organisation;
- 2) adopt a data-driven and performance-based approach to safety regulation and industry oversight activities where appropriate;
- 3) identify safety trends within the aviation industry and adopt a risk-based approach to address areas of greater safety concern or need;
- 4) monitor and measure the safety performance of our aviation system continuously through the aggregate safety performance indicators of Hong Kong as well as our service providers' safety performance indicators;
- 5) collaborate and communicate with the aviation industry to address safety matters and continuously enhance aviation safety;
- 6) promote good safety practices, safety leadership and a positive safety culture within the CAD and industry based on sound safety management principles;
- 7) encourage safety information collection, analysis, sharing and exchange amongst all relevant aviation authorities, industry organisations and service providers, with the intent that such information is to be used for safety management purposes only;
- 8) allocate sufficient financial and human resources for safety management and oversight; and
- 9) equip staff with the proper skills and expertise to discharge their safety oversight and management responsibilities competently.

LIU Chi-yung, Victor, JP
Director-General of Civil Aviation
Civil Aviation Department
Hong Kong, China

APPENDIX 2

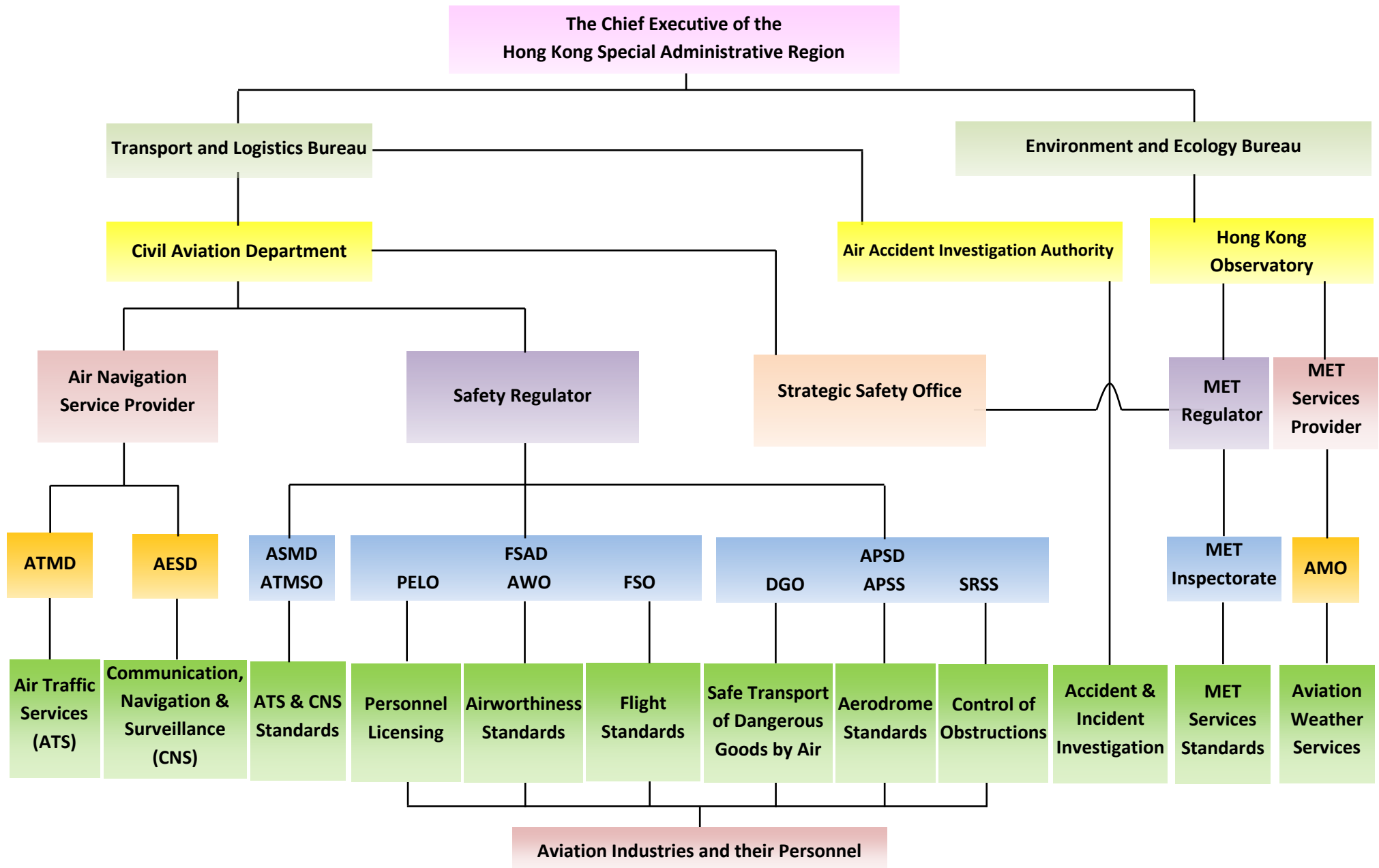
Hong Kong Safety Performance Indicators (See Chapter 2.2.5)

Safety Performance Indicator	Target
Compliance with International Standards	
Differences filed to the ICAO related to the implementation of international aviation safety standards.	< 5 %
ICAO CMA ¹³ audit result - effective implementation of the applicable ICAO Standards and Recommended Practices.	> 90 %
Accident Rates	
“Large Aircraft” Accident Rate (MTOW > 5,700 kg)	< Threshold

Note :- Details are in the Hong Kong Aviation Safety Plan.

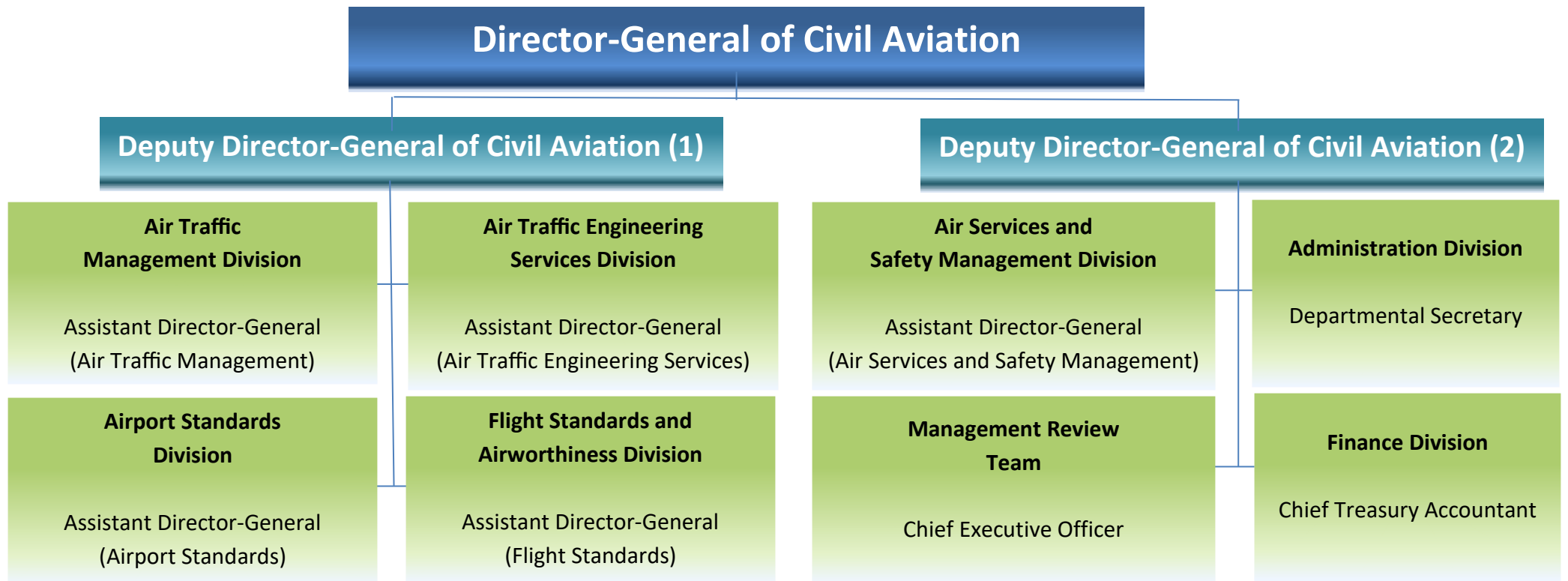
¹³ CMA refers to the Continuous Monitoring Approach by the ICAO on States/Administrations.

Attachment A – Hong Kong Civil Aviation System (See Chapter 1.1)



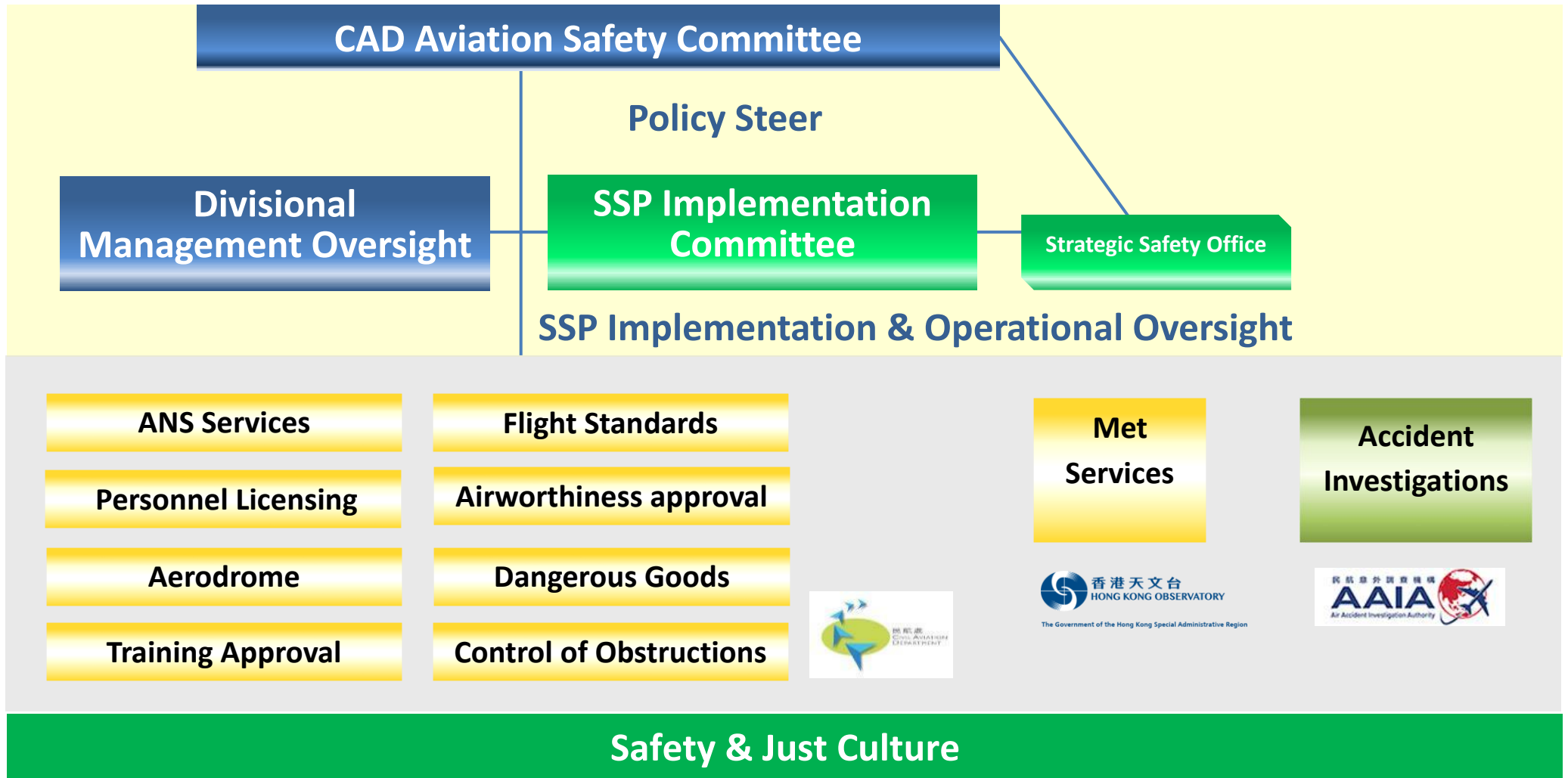
Attachment A1

Organisation Chart of CAD & SSP Coordination (See Chapter 2.1.5 & 2.2.3)



Safety Leadership

Overall Safety Responsibilities



Safety & Just Culture

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