

Kuwait

SSP

State Safety Program

CAP - 104

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Foreword

The rapid growth of aviation requires the adoption of modern safety system that is effective, efficient and adaptive, to assure a consistent growth with the evolving aviation business and operating model. This State Safety Programme document sets the strategy of developing aviation safety management functions in the State of Kuwait. The document outlines our principles and safety objectives, roles, responsibilities, and the necessary processes to effectively implement this strategy. Our approach is consistent with ICAO framework for safety management and the objectives set in the ICAO Global Aviation Safety Plan (GASP). Resources will be allocated for the implementation and maintenance of the State Safety Programme.

The Directorate General of Civil Aviation (DGCA), which is mandated by the Government of the state of Kuwait for the aviation regulatory and oversight functions, is committed to working closely with the stakeholders to develop, effectively implement, and continuously improve the state-level safety management system under the provisions of well-defined and governed State Safety Programme. Our utmost purpose is ascertaining robust safeguard for the well-being of the aviation community and the public.

In the co-ordination, implementation and maintenance of the SSP, different expert groups including the SSP Coordination Group has been established. Resources will be allocated through funding or deployment of expertise as determined by the President of Civil Aviation.

This document and the associated appendices are approved by the President of Civil Aviation. Any changes in the document must be presented to the President for approval.

Approved by:

Abdullah Ali Al-Abdullah Al-Salem Al-Sabah
President of Civil Aviation

President of Civil Aviation
SSP Executive Accountable Manager

Amendment Record

Amendment No.	Date	Remarks
Rev 0	Mar 2022	First Issue

1. Definitions and Abbreviations

1.1 Abbreviations

- AIA: Aviation Investigation Authority
- AAIO: Air Accident Investigation Office
- ALoSP: Acceptable Level of Safety Performance
- AMC: Acceptable Means of Compliance
- ANSP: Air Navigation Service Providers
- ASD: Aviation Safety Department
- ATS: Air Traffic Services
- CASP: Civil Aviation Safety Publication
- CFIT: Controlled Flight into Terrain
- CMA: Continuous Monitoring Approach
- DGCA: Directorate General of Civil Aviation
- AME: Aero-Medical Examiners
- EPAS: European Plan for Aviation Safety
- FCL: Flight Crew licence
- GASP: Global Aviation Safety Plan
- GDP: Gross Domestic Product
- GM: Guidance Material
- ICAO: International Civil Aviation Organisation
- ISO: International organisation for standardisation
- KCASR: Kuwait Civil Aviation Safety Regulation
- LOC-I: Loss of control in Flight
- LSA: Light Sport Aircraft
- MAC: Mid Air Collision
- NASP: National Aviation Safety Plan
- NOSS: Normal Operations Safety Survey
- ORA: Organisation Requirements for Aircrew
- ORP: Organisational Risk Profiles
- ORS: Organisation Risk Scope
- PRP: Policy, Regulation and Planning
- RAIO: Regional Accident and Incident Investigation Organisation
- RASG-MID: Regional Aviation Safety Group – Middle East
- RASP: Regional Aviation Safety Plane
- RBO: Risk Based Oversight
- RSOO: Regional Safety Oversight Organisation
- SAFA: Safety assessment of Foreign Aircraft
- SARP: Standards and Recommended Practices
- SDPCS: Safety Data Collection and Processing Systems
- SMS: Safety Management System
- SRBS: Safety Risk Based System

- SRM: Safety Risk Management
- SPI: Safety performance indicators
- SPT: Safety Performance Targets
- SSO: State Safety Oversight
- SSP: State Safety Programme
- SSPCG: State Safety Programme Coordinating Group
- UA: Unmanned Aircraft
- USOAP: Universal Safety Oversight Audit Programme.

1.2 Definitions:

Accident. An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:

a) a person is fatally or seriously injured as a result of: being in the aircraft, or direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or direct exposure to jet blast, except when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or

b) the aircraft sustains damage or structural failure which: adversely affects the structural strength, performance or flight characteristics of the aircraft, and would normally require major repair or replacement of the affected component, except for engine failure or damage, when the damage is limited to a single engine, (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the random); or c) the aircraft is missing or is completely inaccessible.

N1. For statistical uniformity only, an injury resulting in death within thirty days of the date of the accident is classified, by ICAO, as a fatal injury.

N2. An aircraft is considered to be missing when the official search has been terminated and the wreckage has not been located.

N3. The type of unmanned aircraft system to be investigated is addressed in 5.1 of Annex 13.

N4. Guidance for the determination of aircraft damage can be found in Attachment F of Annex 13.

Aeroplane. A power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces which remain fixed under given conditions of flight.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Hazard. A condition or an object with the potential to or contribute to an aircraft incident or accident.

Helicopter. A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.

Incident. An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation. *Note. - The types of incidents which are of interest for safety-related studies include the incidents listed in Annex 13, Attachment C.*

Industry codes of practice. Guidance material developed by an industry body, for a particular sector of the aviation industry to comply with the requirements of the International Civil Aviation Organisation's Standards and Recommended Practices, other aviation safety requirements and the best practices deemed appropriate.

Note— Some States accept and reference industry codes of practice in the development of regulations to meet the requirements of Annex 19, and make available, for the industry codes of practice, their sources and how they may be obtained.

International general aviation. An aircraft operation other than a commercial air transport operation or an aerial work operation

Operational personnel. Personnel involved in aviation activities who are in a position to report safety information.

Note— Such personnel include, but are not limited to: flight crews; air traffic controllers; aeronautical station operators; maintenance technicians; personnel of aircraft design and manufacturing organisations; cabin crews; flight dispatchers, apron personnel and ground handling personnel.

Safety. The state in which risks associated with activities, related to, or in direct support of the operation of aircraft, are reduced and controlled to an acceptable level.

Safety data. A defined set of facts or set of safety values collected from various aviation-related sources, which is or partially used to maintain or improve safety.

Note. — Such safety data is collected from proactive or reactive safety-related activities, including but not limited to:

a) accident or incident investigations;
b) safety reporting;
c) continuing airworthiness reporting;
d) operational performance monitoring;
e) inspections, audits, surveys; or
f) safety studies and reviews.

Safety information. Safety data processed, organised or analysed in a given context so as to make it useful for safety management purposes.

Safety management system (SMS). A systematic approach to managing safety, including the necessary organisational structures, accountability, responsibilities, policies and procedures.

Safety oversight. A function performed by a State to ensure that individuals and organisations performing an aviation activity comply with safety-related national laws and regulations.

Safety performance. A State or a service provider's safety achievement as defined by its safety performance targets and safety performance indicators.

Safety performance indicator. A data-based parameter used for monitoring and assessing safety performance.

Safety performance target. The State or service provider's planned or intended target for a safety performance indicator over a given period that aligns with the safety objectives.

Safety risk. The predicted probability and severity of consequences or outcomes of a hazard.

Serious injury. An injury which is sustained by a person in an accident and which:

a) requires hospitalisation for more than 48 hours, commencing within seven days from the date the injury was received; or
b) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or
c) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or
d) involves injury to any internal organ; or
e) involves second- or third-degree burns, or any burns affecting more than 5 per cent of the body surface; or
f) involves verified exposure to infectious substances or injurious radiation.

Service provider. Any organisation providing aviation products and/or services and encompasses notably aircraft operators, approved maintenance organisations, organisations responsible for type design and/or manufacture of aircraft, air navigation service providers and certified aerodromes.

State of Design. The State having jurisdiction over the organisation responsible for the type design.

State of Manufacture. The State having jurisdiction over organisation responsible for the final assembly of the aircraft.

State of the Operator. The State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

State safety programme (SSP). An integrated set of regulations and activities aimed at improving safety.

Surveillance. The State activities through which the State proactively verifies through inspections and audits that aviation licence, certificate, authorisation or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State.

2. GENERAL

2.1 References

Decree (30) 1960
Ministerial Resolution (18) 1996
ICAO DOC. 9734
ICAO DOC.9859
Annexes 1, 6, 8, 11, 13, 14, 19
KCASRs 1, 6, 8, 11, 14, 19, 22, 23 and 26

2.2 Kuwait DGCA Vision, Mission & Values

2.2.1 Vision

To provide the highest standard in safety, quality and services in civil aviation and airport operations and to meet all the requirements as per ICAO.

2.2.2 Mission

- To regulate and oversee aviation safety in the state of Kuwait.
- Maintain well directed and targeted oversight using safety data and information.
- Taking feedback and guidance from the RASP and GASP.

2.2.3 Values

I. Safety

Promoting a culture of safety individual and corporate level.

II. People

Developing people to the highest standards and level of expertise in technical and nontechnical areas.

III. Stakeholder Focus

Promoting healthy dialogue and partnership with stakeholders.

IV. Integrity

Applying the highest legal, ethical and moral standards to our work and with each other.

V. Professionalism

Encouraging an atmosphere of mutual respect, responsiveness and teamwork with our stakeholder community, general public and with our colleagues.

VI. Efficiency

Committing to continuous improvement in operations and costs through responsible management.



3. Introduction to the State of Kuwait safety programme

As the State of Kuwait is a signatory to the Convention on International Civil Aviation (Chicago Convention), it has established a robust and progressive regulatory and safety oversight system that conforms with the International Civil Aviation Organisation (ICAO) requirements. Through the ICAO Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA), we proactively seek to address gaps in our implementation of ICAO Standards and Recommended Practices (SARPs) and strengthen our regulatory safety oversight to mitigate new and emerging safety risks.

The State of Kuwait is implementing and maintaining an SSP that allows the integration of State-level safety management activities with the safety management activities of the service providers.

This SSP document articulates the key pillars of the State of Kuwait safety management, which is around four Components and eight Critical Elements (in accordance with the Annex 19 and USOAP framework), with the aim to:

a) ensure Kuwait has an effective legislative framework in place with supporting specific operating regulations;
b) describe the specific activities and responsibilities related to the management of safety in proactive manner ultimately;
c) ensure all relevant personnel have a common understanding of the State safety management functions and activities;
d) ensure State of Kuwait Safety Risk Management (SRM) and safety assurance coordination and synergy among relevant State authorities;
e) support effective implementation and appropriate interaction with service providers' SMS;
f) facilitate the monitoring and measurement of the safety performance of the service providers;
g) maintain and continuously improve the State of Kuwait's overall safety performance; and
h) ensure that the SSP is commensurate with the size and complexity of the State of Kuwait civil aviation system.

Note: State of Kuwait retains responsibility for safety management related functions and activities and does not delegate any of these to any State, Regional Safety Oversight Organisation (RSOO), or Regional Accident and Incident Investigation Organisation (RAIO).

The SSP document is available to all stakeholders and the public via Kuwait DGCA – Aviation Safety Department (ASD) website under Civil Aviation Publications (CAPs) (State Safety Program – SSP (CAP 104)).

Any queries about the content of this document should be forwarded to safety@dgca.gov.kw.

4. State of Kuwait challenges and priorities

4.1 CHALLENGES

4.1.1 Rapid Growth in Air Traffic

The Middle-East region will remain a huge driver of air travel demand over the next 10-15 years. As a key air hub connecting the East and West and beyond, the State of Kuwait will capture a major share of the growth in the Middle East air traffic. It is foreseen that the aviation market of the State of Kuwait will continue to grow during the next 10 years, although at a slightly more conservative pace compared to the last few years and with variations among the different sectors of the industry

In 2018, there were 112,979 (source: Kuwait DGCA) Passengers aircraft movements (international flights) in the State of Kuwait. Air traffic in the Kuwait is expected to double by 2030.

The growth in air traffic introduces additional loads to our aviation system. The State of Kuwait will continue to facilitate high air traffic volumes, without compromising safety standards.

In light of the growth in air traffic and complexity, it is assessed that an organizational structure to be developed to support the implementation and maintenance of the State of Kuwait SSP as the process for the assessment and mitigation of safety risks through SSP implementation. This organizational structure headed by the President of Civil Aviation, the SSP Co-ordination Group and its different DGCA Safety Divisions .

The organizational structure to be reviewed regularly and at least once every 3 years to ensure it is effective and appropriate.

4.1.2 Operational complexity

3.1.2.1 The safety system of the State of Kuwait will continue to be noncomplex due to single aerodrome and one ANSP.

3.1.2.2 Recreational and commercial Drones are already in operation and a very fast expansion of these systems is envisaged in the future. In addition to privacy



issues, it will be necessary to address safety and air traffic issues in order to safely integrate Drones operations into the airspace of the State of Kuwait.

3.1.2.3 The complexity of the industry poses continuous challenges to regulatory, investigation, and air service organisations. Therefore, the allocation of resources to these organisations, as well as staff retention, will need to be carefully planned.

4.1.3 Infrastructure / Technology

3.1.3.1 The continuous growth foreseen, especially at the Kuwait International airport will increase the demand for a whole range of infrastructure and airport, air traffic, rescue and firefighting services, resulting in larger investments in resources by the State to maintain or improve safety.

3.1.3.2 Technology will also continue playing a vital role in the fulfilment of future safety, efficiency, and capacity requirements of the State of Kuwait. Modern aircraft and air traffic management give access to more precise communications, navigation, and surveillance.

3.1.3.3 The State of Kuwait is introducing satellite-based technologies in its airspace to improve safety oversight precision and reliability throughout the country, using automatic dependent surveillance - Broadcast (ADS-B), while navigation is increasingly based on the Global navigation satellite system (GNSS).

3.1.3.4 These technologies are supplemented by robust ground surveillance and navigation systems, including a modern radar surveillance network for on-route and terminal areas.

3.1.3.5 The growing use of technology creates the need for government organisations, the industry, and the aeronautical community in general to make a safe and effective transition to new procedures and processes, to be implemented over several years to facilitate a more effective change.

3.1.3.6 Clear and appropriate regulatory requirements will also be established to support the use of new technology and infrastructure.

3.1.3.7 The State of Kuwait will pursue its commitment to ICAO and other international organisations concerning the development of standards and recommended practices to facilitate safe adoption of new and improved technologies and infrastructure at global, regional and national level.

4.1.4 **Personnel capabilities**

3.1.4.1 The addition of new aircraft, satellite-based navigation systems, and other new technologies requires adequate and duly trained, experienced, and skilled personnel to operate these aircraft, systems, and equipment in a safe and effective manner.

3.1.4.2 Training and development of skilled personnel will be key factors to make sure that aviation safety performance in the State of Kuwait is maintained and improved.

3.1.4.3 The use of system- and risk-based approaches by the industry will require planning strategies for the selection, recruitment, and retention of trained and skilled personnel.

3.1.4.4 Increased use of performance-based rules and risk-based oversight concepts in safety oversight approaches will require a change in the way in which DGCA performs its regulatory oversight functions, which in turn will require different sets of skills for its personnel.

3.1.4.5 The implementation and operation of the SSP means the provision of training for personnel to understand the ICAO Annex 19 requirements to be paramount. DGCA staff members are required to have knowledge in Annex 19, and whereas staff involved in the implementation and operation of the SSP shall be an experienced safety management officer with a detailed understanding on all SSP requirements. This management competencies shall be stated in the job description as a qualification requirement for personnel involved in the SSP implementation and maintenance

4.1.5 **Other Emerging Concerns**

Emerging concern can be seen as risk that is new or increasing.

a) “new” means:
   1) The risk did not previously exist and is caused by a change such new processes, new technologies, social, economic, or organisational change; or
   2) A known long-standing issue/concern newly considered as generating a risk; or
   3) New knowledge allowing a long-standing issue/concern to be identified as a contributor to a risk.

b) “increasing” means:
   1) Number of hazards leading to the risk is growing; or
   2) The exposure to the hazard leading to the risk is increasing; or
   3) The effect of the hazard on safety is getting worse.

The State of Kuwait will keep using its risk management process for early detection of these categories of risk.

4.1.6 Capability and Capability Building

The State of Kuwait is strengthening its capabilities to be able to handle current and future challenges.

The DGCA is building its own next generation of aviation professionals and competencies to:

a) Enable adaption of new regulatory approaches powered by data-driven tools, data analysis and info-communication technology; and
b) Ensure that the resources remain commensurate with size and complexity of the State of Kuwait civil aviation system.

4.2 Global, regional and national priorities

State of Kuwait is committed to working with ICAO, international and regional partners to advance aviation safety globally. We contribute actively at ICAO panels and working bodies, as well as in regional bodies and fora such as the Regional Aviation Safety Group – Middle East (RASG-MID).

4.2.1 Global priorities

4.2.1.1 The ICAO Global Aviation Safety Plan (GASP) establishes the following global aviation safety priorities:

- ✓ improve effective implementation (EI) by States;
- ✓ implement SSP and SMS;
- ✓ reduce accident rates in categories of higher risk to aviation;
- ✓ maintain zero fatalities in aviation accidents;
- ✓ regional collaboration;
- ✓ use of industry programmes; and
- ✓ availability of the appropriate infrastructure in air navigation services and aerodromes to support safe operations.

3.2.1.2 All global priorities are relevant for the aviation industry of the State of Kuwait, despite its excellent safety record in scheduled commercial air transport operations and effective implementation of the USOAP CMA.

3.2.1.3 During the last decade, the State of Kuwait has had a very low rate of occurrence in the following high aviation risk categories: Runway excursion (RE), loss of control in flight (LOC-I), and controlled flight into terrain (CFIT).

3.2.1.4 Nevertheless, the State of Kuwait has taken and will continue to take a series of measures to maintain a low accident rate in the aforementioned accident categories. Furthermore, it will take the following actions:

- ✓ improvement of services that are essential for air navigation and aerodromes;
- ✓ increased surveillance and navigation capacity through broader implementation of ADS-B and GNSS;
- ✓ establishment of local runway safety teams;
- ✓ introduction of advanced surface movement guidance and control systems at Kuwait International airport;
- ✓ publication of various training and educational material highlighting the risk of this type of accidents and risk management measures;
- ✓ conduction of workshops with the industry on relevant topics, such as human factors and flight deck automation;
- ✓ the State of Kuwait undertakes to implement safety measures in support of a safe aviation system in the region and a global harmonised system. Furthermore, it will activate the following safety coordination groups to address the main aviation sectors individually:
  - ➢ Commercial aviation group – aircraft;
  - ➢ Commercial aviation group – helicopters;
  - ➢ General aviation group - aircraft;
  - ➢ General aviation group – helicopters;
  - ➢ Flight training school group;
  - ➢ Airworthiness group;
  - ➢ Air navigation services (ANS) group; and
  - ➢ Aerodromes (AGA) group.

4.2.2 Regional priorities

3.2.2.1 The diversity of the Middle East Region, in addition to forecasts of continuous air traffic growth during the next decade, pose major challenges to regional aviation safety. Taking into account these events and challenges, the global priorities set forth in the GASP have been adopted as regional priorities, but with shorter deadlines. Moreover, the following activities are included:

- ✓ full implementation of performance-based navigation (PBN) in on route and terminal airspace;
- ✓ increased use of air traffic flow management and airport collaborative decision-making (A-CDM);
- ✓ increased use of data link, such as automatic dependent surveillance - Contract (ADS-C) and controller-pilot data link communications (CPDLC); and
- ✓ exchange of data with neighbouring air navigation service providers.

4.2.3 National Priorities

3.3.3.1 The State of Kuwait participates actively in the development of regional aviation safety priorities and policies through forums such as:

- ✓ the Regional safety oversight cooperation system (SRVSOP);
- ✓ the Meeting of air navigation and safety directors;
- ✓ the Meeting of directors general of civil aviation of the MID Region; and
- ✓ the Aviation safety group – MID (RASG-MID)

The safety priority sets out a strategy which supports the prioritisation and continuous improvement of civil aviation safety. The GASP provides a framework for the development and implementation of regional, sub-regional and national plans. Through this document, ICAO promotes harmonisation and coordination of efforts aimed at improving international civil aviation safety.

Operational priorities have been identified in the latest GASP – improving runway safety, mitigating the risk of controlled flight into terrain (CFIT) accidents, and mitigating the risk of loss of control in flight (LOC-I) accidents. These have been incorporated as part of the priorities and targets of the RASG-MID.

State of Kuwait is committed to achieving these priorities and targets, as well as to addressing the challenges unique to our civil aviation system, through the continuous monitoring, assessment, and management of our State's safety performance and the National Aviation Safety Plan (NASP).

STATE SAFETY PROGRAMME COMPONENTS

5. COMPONENT 1: STATE OF KUWAIT SAFETY POLICY, OBJECTIVES AND RESOURCES

This component defines how the State of Kuwait will manage safety throughout its aviation system. It includes determining the requirements, obligations, functions and activities of the different State aviation authorities related to the SSP, as well as the broad safety objectives to be achieved. This component enables the State of Kuwait to provide clear safety guidelines to support an air transportation system that is continuing to grow. The legislative framework aims to manage safety of Kuwait in a proactive manner taking into account the latest trend development globally and domestic issue to ensure compliance with international and national standards.

5.1 CRITICAL ELEMENT 1: PRIMARY AVIATION LEGISLATION

The State of Kuwait has a national aviation safety legislative framework that regulates its civil aviation activities in all domains of the universal safety oversight audit programmes continuous monitoring approach.

5.1.1 Civil Aviation Law – Amiri Decree NO. 30 (1960)

This law provides the basic framework to enable an effective and robust state safety oversight system that is consistent with the provisions of the Chicago Convention and annexes. The law also establishes the Directorate General of Civil Aviation (DGCA) as the formally designated authority for the execution of the Civil Aviation Law to regulate safety and exercise regulatory oversight over civil aviation operations in State of Kuwait and the operations of State of Kuwait aircraft outside the State of Kuwait.

5.2 CRITICAL ELEMENT 2: SPECIFIC OPERATING REGULATIONS

Pursuant to the Ministerial Order No. 3 of 1986 and Ministerial Order No. 18 of 1996, the DGCA is responsible for promulgating the general policy for civil aviation and proposing regulations in the State of Kuwait. The DGCA has developed and published comprehensive civil aviation safety regulations consistent with ICAO SARPs. A continuous review is carried out especially after receipt of ICAO State letters or promulgation of SARPs changes. The review will also include guidance material and implementation policy to ensure they remain relevant and appropriate.

All of State of Kuwait s aviation regulations are available to the public free of charge on a dedicated DGCA - ASD website: (https://kas2.dgca.gov.kw/kasd/aviation-safety-department/kuwait-civil-aviation-safety-regulations-kcasr/)

The rulemaking process is triggered through various channels such as the introduction of new or amended ICAO SARPs, challenges, priorities, the internal and external feedback and the new aviation developments.

Since safety regulations are an important tool used to control safety risks, the DGCA is transitioning towards performance-based regulations.

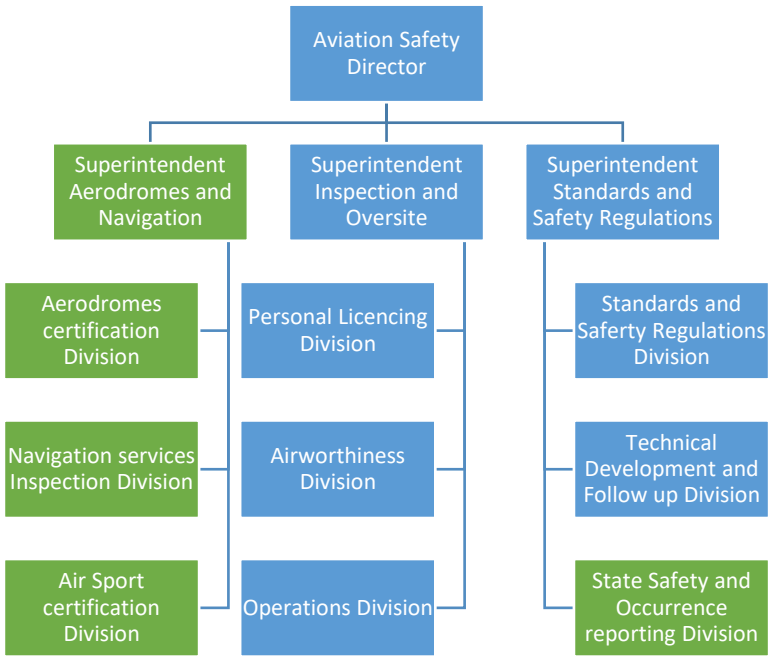
The expectation is that compliance with these regulations will contribute towards achieving the desired level of safety.

5.3 CRITICAL ELEMENT 3: STATE OF KUWAIT SYSTEM AND FUNCTIONS

Access to the data and information contained in any safety database(s) used to support SSP activities is granted by the custodian of the database(s). Each custodian will grant access to any personnel who is required to discharge his/her SSP functions and responsibilities provided that such access does not compromise the established principles of protection of safety data, information and related sources.

5.3.1 SSP Functions and Activities

The SSP functions and activities which include acceptance and monitoring of SMS implementation in compliance with KCASR-19 are already exercised by the existing Divisions of the DGCA/ASD.



The obligations, functions and roles of each Division is clearly detailed in the DGCA-ASD Job Description Manual. The DGCA ASD Job Description Manual helps each authority to understand its contribution to meeting each Annex 19 requirements; most importantly, their responsibility for management of safety in the State of Kuwait. It is periodically reassessed following the safety information generated by the SSP.

5.3.2 **The State of Kuwait DGCA**

The Directorate General of Civil Aviation (DGCA) is the government entity established to co-ordinate, implement and maintain an effective and sustainable State Safety Oversight SSO system through the SSP Coordinating Group (SSPCG), characterised by the following:

a) the promulgation and timely amendment of national regulations and guidance to industry, as well as verifying their effective implementation by service providers in a continuous and systemic manner;
b) a well-balanced allocation of responsibilities between the State and the industry for civil aviation safety;
c) the continuous allocation of the necessary financial and human resources for the State authorities to effectively carry out their responsibilities, functions and activities;

d) The maintenance of harmonious relationships, including communication and consultation between the State and the civil aviation industry, while maintaining effective and clearly separate functional roles, and
e) Review to assure the continuing improvement and effectiveness of the SSP that includes
    - Internal review
    - Aggregate and trend analysis of safety performance at State level based on

        i) safety data analysis and trend gathering from SDCPS
        ii) internal review and external audit analysis reports
        iii) aviation safety reports gathered at a global level
        iv) serious incident and accident reports and its recommendations, and
        v) safety performance measurements of service providers.

5.3.3 Coordination Group for the Maintenance and Implementation of SSP

The State of Kuwait has established the following:

a) The SSP Safety High level committee formulated to discuss and agree on the implementation of SSP. The SSP Safety High level committee includes the President of DGCA as the Chairman and top management personnel of other government entities with a role for implementation of SSP such as the Fire Services Dept, the Coast Guard and Defence Forces for safety and security. Other senior members of DGCA are also included in this committee.

b) The State Safety Programme Coordinating Group (SSPCG) to action all directives of the SSP Safety high level committee. The ASD Director is the Chairman of the SSPCG. Members of the SSPCG would include all divisions and related offices of DGCA. The ASD Director would also be responsible to coordinate efforts of other government entities for successful implementation of SSP.

The SSP Safety High level committee would meet once every 6 months to receive report from the SSPCG and follow up on its recommendations as needed, based upon the SSP safety performance indicators and Kuwait NASP, to assure that corrective or follow up actions are taken for any undesirable trends, or if safety performance targets are not achieved. Similarly, the SSPCG would also meet once every 6 months as a minimum to evaluate the implementation of SSP and the status of completion of any directives from SSP Safety High level committee.

5.3.3.1 The appointment of SSPCG facilitates good communication, avoids duplication of effort and conflicting policies and ensures effective and efficient SSP implementation. This group reports to the President of Civil Aviation. It is made up of representatives from the Air Accident Investigation Office (AAIO), Aviation Safety Department (ASD) and its divisions.

5.4 STATE OF KUWAIT SAFETY PROGRAMME COORDINATION GROUP (SSPCG) TERMS OF REFERENCE

The State of Kuwait Safety Programme Coordination Group (SSPCG) is a committee established to coordinate all SSP activities. The group is chaired by the ASD Director, and comprises of ASD Superintendents and Head of divisions. The SSPCG oversees the development and implementation of the SSP and reviews the level of safety performance and policies and practices related to SSP.

The SSP COORDINATION GROUP was established under the instruction of the DGCA President or Director General. The Group has the following roles

a) Supervising the safety management activities and providing necessary guidance to the DGCA front line personnel and the service providers;
b) Recommending to Senior Management changes to the Policies, Objectives and Plans and any other means established to implement and maintain effective SSP;
c) Reviewing / updating / communicating / monitoring of (ALoSP);
d) Ensuring that appropriate and up-to-date information is provided to decision-makers and personnel involved in the implementation and maintenance of the SSP;
e) Development of the National Aviation Safety Plan;
f) Monitoring the effectiveness of corrective actions;
g) Monitoring the compatibility between safety performance indicators and safety objectives;
h) Management of changes as per 6.3 and updating the risk register accordingly;
i) Monitoring the development and updating of the risk register and identifying sources of data related to the register;
j) Monitoring risk assessments and prioritisation and mitigation of safety risks;
k) Identifying the training needs of the employees of the operational sector to carry out the safety management duties entrusted to them as well as the training needs of stakeholders from the senior management;
l) Following up on the audit results of safety management systems of service providers and following up the implementation of risk-based oversight;
m) Developing and updating the State Safety Programme Document;
n) Proposing amendments to laws in the interest of safety management;
o) Reviewing and updating of safety management system regulations;

p) Identifying and implementing safety promotion programmes and supervise safety information sharing programmes;
q) Coordinating with the Air Accident Investigation Office regarding recommendations, their follow-up, training needs related to safety management and regulations and procedures that require coordination;
r) Coordinating all activities of different Government organization under the SSP implementation and maintenance;
s) Coordinating with the Aviation Security Sector regarding dangerous goods, training needs related to safety management and regulations and procedures that require coordination;
t) Carrying out any other tasks related to the State Safety Programme; and
u) Developing procedures and principles to implement the mentioned tasks.

5.5 Aviation Safety Department

Aviation Safety Department (ASD) of the State of Kuwait DGCA is responsible for supporting the State of Kuwait government in the definition of State of Kuwait National Aviation Safety Policies (NASP), developing and issuing regulations, certifying, licensing, overseeing, supporting the development of policies for all technical domains, coordinating national and international technical strategic agreements and providing technical experts for the air accidents and incidents investigation.

ASD is responsible for regulating, certifying, licensing, providing continuous oversight and monitoring of safety performance of service providers (of all domains of USOAP, (AIG is under the AIG office) through the following functional business units.

The ASD is also responsible for storage, archiving, protection and retrieval of all documents relating to all SSP activities. The ASD shall have a system of record keeping that allows adequate storage and reliable traceability of all records related to SSP processes in –

a) Records stored in a manner that ensures protection from damage, alteration and theft;
b) The record keeping system ensures that all records are accessible whenever needed and organized in a way that ensures traceability throughout the required retention period;
c) Paper systems use robust material which can withstand normal wear and tear handling and filing
d) A back up system. The computer hardware used to ensure data backup shall be stored in a different location from that containing the working data. When hardware and software changes take place, special care shall be taken to ensure

that all necessary data continues to be accessible. All records are to be kept for a minimum period of 5 years;

e) The computer system shall include safeguards against the ability of an unauthorized personnel to alter the data;

f) Records related to SSP processes include but not limited to –
   - The results of the assessment of the potential adverse consequences or outcome of each hazard
   - Safety performance indicators, targets and related charts
   - Records of completed or in-progress safety assessments

5.5.1 Standards and Safety Regulation Superintendent and Related Divisions

Its functions, which are set out in the DGCA Job Description Manual, include the following:

a) Management of State of Kuwait 's obligations under the ICAO USOAP CMA;

b) Implementation of the SSP and coordination with internal and external stakeholders on relevant SSP activities;

c) Day-to-day planning and management of the SSP implementation to ensure that the various aspects work together to deliver the State's safety objectives;

d) Identification and analysis of safety trends and monitoring of safety indicators;

e) Analysis of safety data and information from the SDCPS and associated safety databases by appropriately trained and qualified personnel;

f) Formulation and review of aviation safety policies across ASAS;

g) Ensuring conformance with relevant Annexe(s) to the Chicago Convention: Annex 19: Safety Management (SSP part)

5.5.2 Inspection Superintendent and Related Divisions

It will supervise Airworthiness, Operations and Personnel Licensing Division.

5.5.3 Airworthiness Division

Its functions, which are set out in the DGCA Job Description Manual, include the following:

a) Conduct of safety oversight, and development and implementation of regulations relating to:
   - airworthiness of State of Kuwait -registered aircraft
   - maintenance, design and production organisations

b) Support Policy, Regulation and Planning in the implementation and maintenance of SSP;

c) Ensuring compliance with relevant Annexe(s) to the Chicago Convention:

5.5.4 **Flight Operations Division**

Its functions, which are set out in the DGCA Job Description Manual, include the following:

a) Conduct of safety oversight, and development and implementation of regulations relating to:
   - operations of State of Kuwait air operators
   - general aviation aircraft and operations
   - qualification of flight simulation training devices
   - carriage of dangerous goods
   - surveillance of foreign operators

b) Support Policy, Regulation and Planning in the implementation and maintenance of SSP;

c) Ensuring compliance with relevant Annexe(s) to the Chicago Convention.

5.5.5 **Personnel Licensing Division**

Its functions, which are set out in the DGCA Job Description Manual, include the following:

a) Management of the development of regulations, guidance material and internal procedures; regulation and licensing of flight/cabin crew, flight dispatcher's aircraft maintenance engineers and air traffic controllers; and conduct of safety oversight of approved training organisations and flight simulation training devices.

b) Development of aeromedical policies and standards relating to medical fitness certification of flight/cabin crew and air traffic controllers; implementation of the medical examination and fitness certification system; and the provision of training for and supervision of Designated Medical Examiners (DMEs) appointed by the DGCA and nomination of suitably qualified physicians to be appointed as Medical Assessors to support the fitness certification system.

c) Support Policy, Regulation and Planning in the implementation and maintenance of SSP;

d) Ensuring compliance with relevant Annexes to the Chicago Convention.

5.5.6 Air Navigation and Aerodromes Superintendent and Related Divisions

Its functions, which are set out in the DGCA Job Description Manual, include the following:

a) Conduct of safety oversight of the aerodrome operator, air navigation service provider and aeronautical meteorological services provider, as well as the development and implementation of regulations for aerodrome operations and air traffic services (ATS); and
b) Support Policy, Regulation and Planning in the implementation and maintenance of SSP;
c) Ensuring compliance with relevant Annexes to the Chicago Convention.

5.5.7 Air Accident Investigation Office (AAIO)

The accident investigation process has a pivotal role in the SSP. It enables the State of Kuwait to identify contributing factors, system deficiencies, any potential failures within the aviation system, and to generate the necessary countermeasures to prevent recurrence.

The sole objective of the function of the Air Accident Investigation Office is for prevention of accidents and incidents, and not the apportioning of blame or liability.

This activity contributes to the continuous improvement of aviation safety by identifying active failures and contributing factors of accidents/incidents and providing reports on any lessons learned from analysis of events. This can support development of corrective actions decisions and corresponding allocation of resources and may identify necessary improvements to the aviation system.

The State of Kuwait 's AAI authority, represented by the "Air Accident Investigation Office" (AAIO) within the State of Kuwait DGCA, is functionally independent from. The AAIO when established is to be under the Office of the President. The establishment of the AAIO under the Office of the President is to ensure independence in air accident investigation and possible conflict of interest. An occurrence when carried out by the Inspectors of the AAIO would be answerable to the President and the State of Kuwait rather than to DGCA.

The rationale for the independence of this function from the DGCA is to remove any limits for identifying accident causation, and also identifying any interlinks between systemic deficiencies in the regulatory safety oversight or SSP-related factors. In addition, such independence enhances the viability of the AAIO and prevents any actual or potential conflict of interest. However, the AAIO would not restrict the DGCA to carry

out investigation on any Air Accident and Incident for the sake of safety improvement as long as their investigation would not affect the functions of AAIO.

AAIO is responsible for conducting investigations into aircraft accidents and incidents in accordance with Annex 13 to the Chicago Convention. Its functions, which are set out in the DGCA-AAIO Manual, include the following:

a) conduct of investigations into accidents and selected serious incidents which occur in State of Kuwait;
b) conduct of investigations into accidents and selected serious incidents that occur outside State of Kuwait, where a State of Kuwait-registered aircraft or operator is involved, if the investigation has been delegated to State of Kuwait, or the occurrence is in a non-contracting state with no intention of carrying out the investigation;
c) conduct of investigations into incidents from which air safety lessons may be derived; and
d) participation in the investigations conducted by foreign States on accidents or incidents where a State of Kuwait registered aircraft or operator is involved.

AAIO ensures that the personnel responsible for addressing safety management-related aspects in aircraft accidents and incidents investigations have developed the required competencies and received guidance materials to help them ensure that safety management related aspects are appropriately addressed in investigations, when relevant. Adequate resources will be allocated for training of staff members to be a qualified Aircraft Accident/Incident Inspector and management of an accident/incident.

When necessary, staff from DGCA could be directed to assume duties in AAIO. During the time of secondment, they will be answerable to the President. On completion of the required duties, the seconded staff could return to his original duties in DGCA. DGCA would be expected to treat all staff previously served AAIO in a fair and professional manner to ensure there is no element of retribution.

5.5.8 State of Kuwait Safety Policy and Objectives

State safety policy and State safety objectives are high-level statements endorsed by the President of the Civil Aviation to reflect commitment by the State of Kuwait towards an effective SSP. The State safety policy and objectives are reviewed once every 3 years to ensure it is consistent with the ICAO policy and objectives.

5.5.9 State Safety Policy

State of Kuwait safety policy (Refer to Appendix 1) projects the State of Kuwait's intentions, including commitment, and direction to safety and to the promotion of a

positive safety culture in the State. The State of Kuwait State Policy is complemented by a State of Kuwait Enforcement Policy (Refer to Appendix 2).

It is periodically reassessed following the safety information generated by the SSP or at least once every 3 years.

5.5.10 State Safety Objectives

State of Kuwait Safety Objectives (Appendix 3) have been established with a clear understanding of the highest safety risks in the State of Kuwait aviation system and the State of Kuwait's priorities for the management of safety. They are used to provide direction for the establishment and achievement of the overall ALoSP (Refer to 6.2.2) via the selection of appropriate SPI/SPT (refer to 6.2.4). They provide a blueprint for allocating and directing the State's resources.

The Safety Objectives are periodically once every 3 years for reassessment or following the safety information generated by the SSP when applicable.

5.5.11 State Safety Resources

The President of civil aviation, has included in his functions to provide the necessary resources to related government Departments and DGCA for implementation of SSP. The DGCA relies on government funding and (fees and charges) to fund its regulatory and investigation activities. To achieve its safety objectives, sufficient resources at different levels are allocated to ensure that the State Safety Policy is also implemented and State Safety Objectives are achieved.

The availability of the necessary resources and competencies for SSP implementation are determined using a manpower methodology considering the size and complexity of the aviation sector.

The availability of resources and competencies is periodically reassessed following the safety information generated by the SSP or once a year to cater for training and resources allocation purposes.

5.5.12 State of Kuwait National Aviation Safety Plan (NASP)

Safety plans are used to achieve safety objectives and to detail actions taken to improve safety as well as to communicate them to the State authorities' staff as well as to the industry.



The NASP sets out how the State of Kuwait manages safety risks. It is used to manage actions associated with the mitigation, monitoring and measuring of specific safety risks and to communicate them to the industry.

It is periodically reassessed following the safety information generated by the SSP, ICAO GASP updates and ICAO MID Regional Aviation Safety Group (RASG) safety initiatives or any other sources available. (Kuwait NASP CAP 102)

5.5.13 **SSP Document**

To ensure that all relevant personnel have a common understanding of the State safety management functions and activities, the State of Kuwait has developed and published this SSP document. This SSP document includes the SSP structure and associated programmes, how SSP's various components work together, as well as the roles and responsibilities of the different State aviation divisions authorities.

This SSP document is:

a) complemented by existing processes and procedures and broadly describe how the various SSP sub programmes work together to improve safety;
b) under the control of the DGCA;
c) disseminated via State of Kuwait DGCA website; and
d) is periodically reassessed following the safety information generated by the SSP or at least once every 3 years.

5.5.14 **Enforcement Policy**

The State of Kuwait has established an enforcement policy (Refer to Appendix 2) that:

a) Supports and encourages a positive safety culture;
b) describes how the State of Kuwait assures protection of safety data and safety information and related sources, especially if information provided is self-incriminating; and
c) Specifies the conditions and circumstances under which service providers with an SMS are allowed to deal with and resolve events involving certain safety issues or deviations internally, within the context of their SMS and to the satisfaction of the DGCA, provided that the SMS is in accordance with the SMS framework and shown to be effective and mature.

The Enforcement Policy is periodically (every 3 years) reassessed following the safety information generated by the SSP.

5.6 CRITICAL ELEMENT 4: QUALIFIED TECHNICAL PERSONNEL

The State of Kuwait has established a training and development methodology and programme for all staff involved in the SSP to ensure they have the appropriate competency and knowledge. The training programme comprises of initial, recurrent, specialised modules, on-job-training. This includes a comprehensive induction programme for personnel, covering generic training on people management, audit, systems and tools, the regulatory environment, SSP and SMS.

To assess the gap in the competency, an employee development plan is created every two years with a particular focus on technical staff having safety duties. Ad-hoc training courses are arranged based on emerging needs. The SSP Coordination Group also supervises the competence of concerned personnel and report to the president of the DGCA on staff training requirements especially on SSP training plan for personnel involved in the implementation and maintenance of the SSP.

5.7 CRITICAL ELEMENT 5: TECHNICAL GUIDANCE, TOOLS AND PROVISION OF SAFETY-CRITICAL INFORMATION.

The State of Kuwait DGCA ASD provides its personnel and service providers with a clear set of technical guidance (e.g. AMC, GM, CASP, CAPs forms, procedures manuals), tools (e.g. transportation, offices, telephones and other communication facilities, access to the internet, technical library) , Q-Pulse) and safety critical information (e.g. NOTAM, Airworthiness Directive, Safety Decision, Alerts) to ensure appropriate performance of safety related duties, in all USOAP domains (except AIG), including SSP-related functions and activities and initial acceptance and continuous surveillance of service provider' SMS.

6. COMPONENT 2: STATE SAFETY RISK MANAGEMENT

The State of Kuwait needs to identify potential safety risks to their aviation system. Therefore, the State of Kuwait has developed and implemented proactive processes to identify and address precursors and contributors of accidents, and strategically manage safety resources to maximise safety improvements.

The State of Kuwait's SRM component includes the implementation of:

a) SMS by service providers including hazard identification processes and the management of associated safety risks under KCASR 19.
b) The principles of SRM to DGCA's own activities, with due regards of the interface with SMS mandated on service providers. These include activities such as the development of regulations and prioritisation of surveillance activities based on assessed risk.

6.1 CRITICAL ELEMENT 6: LICENSING, CERTIFICATION, AUTHORIZATION AND APPROVAL OBLIGATIONS

6.1.1 General Considerations

Specific requirements and conditions for aviation documents such as licences, certificates, authorisations and approvals are established in the national regulatory framework.

The DGCA has established and implemented documented processes and procedures to ensure that individuals and organisations performing an aviation activity meet the established requirements before they are allowed to exercise the privileges of the aviation document.

For each CE-6 activity, a file is maintained that includes, but not be limited to, the following:

a) application and associated documents;
b) service provider manual;
c) audit/inspection files;
d) corrective action plans and evidence of implementation;
e) if applicable, exception or exemption files (including safety studies and their assessment); and
f) copy of the certificate (and associated specifications, if applicable), licence, authorisation or approval.

6.1.2 **Personnel Licensing**

Personnel licensing activities include, but are not limited to, the following:

a) approval of training courses;
b) approval of the use of simulation training devices and the authorisation for their use, in order to gain the experience or demonstrate the skill required for the issue of a licence or rating;
c) approval, designation and supervision of individuals or organisations (including medical examiners) delegated to perform specific tasks on behalf of the personnel licensing office;
d) assessment and approval of applications for licences and ratings;
e) assessments of medical fitness relating to licence requirements;
f) issue of licences and ratings; and
g) validation and conversion of licences and ratings issued by other States.

6.1.3 **Certificates and Approvals**

Training organisations, air operators, aircraft maintenance organisations, air navigation service providers and aerodromes can't operate unless they are granted a certificate or an approval from the DGCA.

The certification and approval processes include, but not limited to, the following:

a) dealing with expression of interest, including coordination with other concerned authorities;
b) initial review of the documentation submitted by the service provider, including key personnel's competence and operating procedures;
c) on-site audits and/or inspections to verify technical aspects and assess the service provider's organisation, competence and implementation of its operating procedures;
d) if necessary, assessment of exemption request and supporting documents (e.g. aeronautical studies) with on-site inspections as needed, resulting in the granting (or denial) of exemptions with corresponding mitigation measures;
e) assessment of the corrective action plans submitted by the service provider to resolve findings and non-compliances and acceptance (or rejection) of corrective actions, mitigation measures and associated timelines;
f) issuance of the certificate or approval, with indication of operating conditions (and limitations, if applicable);
g) renewal or continuing validity of the certificates subject to satisfactory performance; and
h) transfer or surrender of certificates.

6.2 SAFETY MANAGEMENT SYSTEM OBLIGATIONS

The purpose of an SMS is to ensure service providers have a systematic approach to manage safety. It is designed to continuously improve safety performance through the identification of hazards, the collection and analysis of safety data and safety information, and the continuous assessment of safety risks.

An effective SMS demonstrates to the DGCA, the ability of the concerned service providers to manage safety risks and provides for effective management of safety at the State of Kuwait level.

6.2.1 SMS Regulatory Requirements

The State of Kuwait has promulgated its SMS regulations KCASR 19 to require all aircraft operators under ICAO Annex 6 Part I and Part III Section II, Air Traffic Services provider under ICAO Annex 11, Aerodrome operator under ICAO Annex 14, some categories of service providers, including approved training organizations under ICAO Annex 1 and international general aviation operators, to implement and maintain an SMS that is consistent with ICAO SMS principles.

KCASR 19 (appendices) also contains means of compliance and guidance materials and examples to enhance the efficiency of service providers' SMS. It is reviewed periodically and at least once every 2 years to ensure they remain relevant and appropriate to the service providers following the safety information generated by the SSP and triggers as per 4.2.

6.2.2 Initial Acceptance and Continuous Surveillance of an SMS

As per KCASR 19, the SMS must be acceptable to the DGCA. As such, DGCA inspectors will carry out initial and subsequent detailed review for acceptance of a service provider's SMS following relevant guidance. KCASR 19 identifies the types of organisations required to implement an SMS. Under the CE-5, several tools, guidance and training have been provided to support SMS implementation and maintenance. Once accepted, the SMS of a service provider shall be continually monitored by DGCA through surveillance to assess the effectiveness of the SMS. A comprehensive monitoring as part of the surveillance programme to be maintained and the SMS shall be re-accepted every 2 years.

The SMS of a service provider is under the continuous assessment as defined in the surveillance programme of the DGCA to ensure that service providers:

a) have an effective hazard identification and risk assessment processes;

b) monitor and analyse safety data to identify trends and take appropriate action; when needed;
c) review and monitor safety performance indicators (SPIs), alert levels and target levels, when applicable;
d) enable and promote the exchange of safety information within their organisation and with other sectors of civil aviation, when needed.

6.2.3 Acceptance of Service Provider's SPIs and SPTs

SPIs and SPTs proposed by service providers are reviewed and agreed by the DGCA as part of the SMS acceptance and continued surveillance to ensure they are appropriate to the service provider's specific operational context. The service providers SPIs and SPTs are to be reviewed at least once every 2 years to ensure they remain acceptable by DGCA.

Some of these SPIs and SPTs are linked to the STATE OF KUWAIT SPIs and SPTs for measuring and monitoring the ALoSP (refer to Appendix 3).

6.3 HAZARD IDENTIFICATION, SAFETY RISK ASSESSMENT AND MANAGEMENT

The State of Kuwait has established a hazard identification and safety risk assessment process (SRM process) to ensure that:

a) safety management in the State of Kuwait aviation complies with the international requirements and includes the best practices;
b) the safety policy is implemented and safety objectives are embedded in everyday operations and policies;
c) the DGCA is able to leverage information to identify key hazards in State of Kuwait aviation and to assess related risks; and
d) State of Kuwait safety management is systematic, proactive, and capable of responding rapidly when necessary.

This process is reviewed periodically and at least once every 3 years to ensure that it remains functional, effective, and well-documented.

6.3.1 **Hazard Identification**

6.3.1.1 SDCPS in use in the State of Kuwait

In the State of Kuwait, the hazard identification process uses several Safety Data Collection and Processing Systems (SDCPSs) that enable proactive and reactive hazard identification:

a) Mandatory Occurrence Reporting Systems.
b) Data from audit findings/reports.
c) Safety data from other States, regional safety oversight organisations, and international Aviation bodies. (ICAO Safety report – RASG meeting report – MID ASRT report).
d) Accidents and Incidents Investigation Reports.
e) Voluntary Reporting System.

Data is collected from multiple sectors to provide a comprehensive understanding of each hazard across the total system. Each custodian of an SDCPS has put in place policies, procedures, and hazard analysis tool to ensure data is captured, collected, stored, aggregated, and analysed by appropriately trained and competent personnel.

It is the objective of Kuwait to progress to predictive hazard identification process when SSP has reached the mature level. It is the SSP Enforcement Policy that sources of information and safety data collected will be protected and prevented for use or disclosure for purposes other than safety improvement

6.3.1.2 Mandatory Occurrence Report

The DGCA/ASD will utilize the ICAO SIMs system.

6.3.1.3 Voluntary Report

The DGCA/ASD will utilize Kuwait DGCA reporting system.

6.3.1.4 Protection Policy

State of Kuwait Policy on Protection of Safety Data, Safety Information and Related Sources (Refer to Appendix 1) projects the State of Kuwait's intentions, including commitment, and direction to protect safety data, information and associated sources, as well the condition to apply exception to the protection.

It is periodically reassessed following the safety information generated by the SSP.

6.3.2 **Safety Risks Assessment and Management**

6.3.2.1 Safety Risks Assessment

The State of Kuwait safety risk assessment process aims at evaluating the tolerability of the identified risks based on their calculated or estimated probability and their severity. A process has been established allowing:

a) Risk prioritisation;
b) Determination of safety risk probability, safety risk severity and safety risk tolerability; and
c) Determination of the safety risk mitigation strategies and their monitoring.

6.4 CRITICAL ELEMENT 8: Resolution of Safety Concerns – Management of Safety Risks

The State of Kuwait has established a process for the management of safety risks to ensure safety risks are controlled and an ALoSP is achieved.

The Management of Safety Risks may lead to:

a) promulgating additional policies, regulations or directives;
b) safety promotion activities;
c) direct intervention with a service provider (i.e. On notice programmes in accordance with safety audit standards or enforcement actions); and
d) evaluation of each proposed safety risk control.

Once safety risk controls have been selected and implemented, monitoring and validation of each proposed safety risk control is assured as a next step to ensure the intended goals have been achieved.

7. COMPONENT 3: STATE OF KUWAIT SAFETY ASSURANCE

State of Kuwait safety assurance activities, as part of SSP, provide the State of Kuwait with assurance that its safety processes are functioning effectively and the State of Kuwait is on target to achieve its safety objectives via the collective efforts of the State of Kuwait's service providers

7.1 CRITICAL ELEMENT 7: SURVEILLANCE OBLIGATIONS

Surveillance activities conducted by the State of Kuwait, information coming from established SDCPSs and safety promotion activities enabling sharing and exchange within State of Kuwait ensure that regulatory safety risk controls are appropriately integrated into a service provider's SMS.

7.1.1 Surveillance Process

The State of Kuwait uses a documented surveillance process (compliance monitoring) to define and plan inspections, conduct audits and monitor activities on a continuous basis, and proactively ensure that aviation document holders continue to meet the established requirements. This process includes the surveillance of personnel designated to perform safety oversight functions. For SMS compliance monitoring, the surveillance system shall include review of service provider's hazard identification and safety risk assessment processes to determine the effectiveness of the SMS. The monitoring programme should include a periodic review (once every 2 years as a minimum) of the service providers SPIs and SPTs

7.1.2 Risk-Based Oversight

7.1.2.1 Risk-Based Oversight Methodology

The State of Kuwait is in the process of introducing Risk-Based Oversight (RBO) approach surveillance programme to develop prioritisation of inspections, audits and surveys activities towards those areas of greater safety concern or need and allocation of resources commensurate with the safety risk profile of each sector or individual service provider. To move from the conventional compliance monitoring system to an RBO system, the DGCA is also monitoring the maturity level of service providers' safety assurance, and in particular, their management of safety performance. The prioritization of inspections and audits will be associated with the analysis of relevant internal/external safety data or quality data.

RBO is defined as a means of performing oversight where the:

a) planning is driven by the Organisation Risk Profile (ORP) decision-making tool and execution, besides ensuring compliance; and
b) scope of oversight is derived from Organisation Risk Scope (ORS) decision-making tool.

RBO is a data-driven methodology that facilitates decision-making and offers concerned staff information on the best approach to assure effective and efficient management of safety.

The foundation of an effective RBO is reliable and uses meaningful data. The State of Kuwait continuously works on reinforcing its data management capabilities.

These profiles evaluate common safety risks that affect multiple service providers with similar types of operations. They facilitate safety risk ranking among service providers within a specific aviation sector or across sectors, and support the allocation of surveillance resources to sectors or activities with greatest safety need.

RBO is being applied to all service providers including those with a mature SMS and those where SMS has not yet been implemented.

7.1.2.2 ORP DECISION-MAKING TOOL

To support the process of modifying the frequency of surveillance activities of the different aviation sectors, the DGCA has established its data-driven decision tool - Organisational Risk Profile. These profiles capture and aggregate information that is already available and include factors such as:

a) The financial health of the organisation;
b) Number of years in operation;
c) Turnover rate of the key personnel such as the accountable executive and safety manager;
d) Competence and performance of the accountable executive;
e) Competence and performance of the safety manager;
f) Results of previous audits;
g) Timely and effective resolution of previous findings;
h) Measures of relative level of activity (exposure to safety risk);
i) Indicators of the relative scope and complexity of the activities being performed;
j) Maturity of the hazard identification and safety risk assessment process; and
k) Measures of safety performance from State safety data analysis and performance monitoring activities.

7.1.2.3 ORS DECISION-MAKING TOOL

To support the process of modifying the scope of surveillance activities of the different aviation sectors, the DGCA has established its data-driven decision tool - Organisational Risk Scope. It captures and aggregates information that is already available from the audit database.

ORS has been initiated based on "structured" data (e.g. audit findings) and it targets areas with greatest need.

7.2 STATE of KUWAIT SAFETY PERFORMANCE MANAGEMENT

7.2.1 General

The State of Kuwait Safety performance management is about asking and answering the four most important questions regarding safety management:

a) What are the State of Kuwait's top safety risks? They are derived from a review of aviation accident and incident data as well as reactive/proactive and predictive analysis to identify and define emerging risks.
b) What does the State want to achieve in terms of safety and what are the top safety risks that need to be addressed? They are the State's safety objectives.
c) How will the State know if it is making progress toward its safety objectives? This determination is through SPIs, SPTs and, if practicable, safety triggers.
d) What safety data and safety information are needed to make informed safety decisions? This is generally achieved through an evolving SDCPS and safety data analysis.

7.2.2 Acceptable Level of Safety Performance (ALOSP)

An (ALoSP) process has been developed to maintain and continuously improve the safety performance of the entire State of Kuwait aviation system. It details means for the establishment, the communication, the continuous monitoring and the periodic review of the State of Kuwait (ALoSP). (refer to NASP).

In the State of Kuwait, (ALoSP) is achieved when the following conditions are met:

a) Implementation and maintenance of the SSP, including implementation of ICAO SARPs and service providers' SMS. This condition though not part of the (ALoSP) is important in contributing towards achieving the safety objectives; and

b) Implementation and maintenance of select SPIs and SPTs showing that safety is being effectively managed.

The SSP Coordination Group is responsible for the review, update, communication, monitoring of (ALoSP).

7.2.3 Implementation and Maintenance of the SSP

7.2.3.1 SSP Implementation

Initially, the DGCA has conducted a gap analysis to gain a detailed understanding of the gap between the existing structures and processes, and those required for an effective SSP implementation in the State of Kuwait. The gap analysis revealed that considerable safety management capability already existed. The elements and processes identified as requiring action were introduced in the SSP implementation plan.

7.2.3.2 SSP Continuing Improvement, Effectiveness and Maintenance

The continuing improvement and maintenance of the SSP will be determined through an internal review mechanism and is established with the superintendent post. The internal review should be carried out at least once every 3 years or sooner if deemed necessary. The internal review mechanism of the SSP will be determined through different monitoring mechanisms such as:

a) Review performed by Sector superintendents;
b) Aggregation and trend analysis of safety performance at State level based on:

I. Safety data analysis and trends gathered from SDCPS;
II. Internal/external audit analysis reports;
III. Aviation safety reports gathered at a global level;
IV. Serious incident and accident reports and recommendations; and
V. Safety performance measurements of service providers.

7.2.4 Implementation and Maintenance of SPIs and SPTs

7.2.4.1 Service Provider's SPIs AND SPTs

The SMS regulation (i.e. KCASR 19) requires the agreement and monitoring of SPI performance which should be a combination of process and outcome-oriented indicators.

DGCA inspectors in charge of relevant service providers shall conduct initial review in accordance with the relevant inspector's manual for acceptance of the SMS. The service provider's SPIs and SPTs should also be accepted after review and agreement with the service provider.

After their agreement, service provider's SPIs and SPTs are periodically reviewed as per established process. The review takes into consideration the performance and effectiveness of each SPI and SPT and may show the need to adjust support the continuous safety improvement.

7.2.4.2 State of Kuwait SPIs AND SPTs

The State of Kuwait has agreed meaningful SPIs to reflect the specific operational environment and to highlight conditions that can be used to identify how safety risks are being controlled. SPIs encompass all areas of the State of Kuwait aviation system, with safety performance-related information from its service providers. They are used to support the monitoring of the State of Kuwait's safety performance. These SPIs are a combination of high- and low-level indicators.

A periodic review is conducted because the aviation system is dynamic and constantly changing. (refer to NASP for actions to be taken when SPT is not met)

7.3 MANAGEMENT OF CHANGE

Changes are an ever-present fact in the aviation system. They can be operational or organisational.

Changes may introduce hazards that may impact the effectiveness of existing safety defences.

Consequently, the State of Kuwait has developed a process to assess the impact of changes at a State level to proactively identify the safety impact of change before they are implemented. The process facilitates the planning and execution of proposed changes in a structured way allowing efficient analysis of their impact on the existing system.

The Management of Change process focuses on the changes that could have a significant impact on the State of Kuwait's ability to fulfil its legal obligations. No operation takes place in a changed system or operational context until all safety risks are evaluated.

Organisational and operational changes that generally qualify for the conduct of a management of change are:

a) reorganisation of the State of Kuwait aviation authorities and re-allocation of responsibilities;
b) changes in the SSP processes, including changes in methodology such as RBO, SRM and safety assurance processes.
c) changes in the regulatory environment, such as changes in existing the State of Kuwait safety policies, programmes, and regulations;
d) changes in the operational environment, such as introduction of new technologies, changes in infrastructure, equipment and services, changes in the airspace;
e) rapid changes in the industry (expanding, contracting, morphing) and its potential impact on the State of Kuwait oversight and performance monitoring capabilities.

8. COMPONENT 4: THE STATE OF KUWAIT SAFETY PROMOTION

An effective Safety Promotion supports the development of a positive culture that fosters an effective and efficient SSP, which in turn should lead to improvement of safety performance.

The State of Kuwait promotes safety awareness and the sharing and exchange of safety information internally and externally. A Safety Communication Plan in its annual operational plan is used to develop, document, implement and maintain formal means for:

a) improving system-wide positive safety culture including reporting;
b) enabling and promoting the exchange of safety information among service providers
c) ensuring that appropriate tools, processes, trainings, education and expertise are made available to carry any SMS activity and any SSP related activity;
d) conveying safety critical information in a timely manner;
e) explaining why particular safety actions are taken or any change to the system is made;
f) participate in regional and global aviation safety information sharing and exchange and with the RASG; and
g) facilitate participation of service providers in regional and global information sharing.

Note: *Safety data, safety information and related sources are protected, unless a principle of exception applies.*

The State of Kuwait Safety Communication Plan consists of two components in para 8.1 and 8.2 below.

8.1 INTERNAL COMMUNICATION AND DISSEMINATION OF INFORMATION

The State of Kuwait will establish appropriate mechanisms (e.g. formal communication channels between the members of the SSP Coordination Group, ASD and AAIO) to facilitate SSP implementation and improve system-wide positive safety culture by ensuring that:

a) actions related to the management of safety are visibly supported by management;

b) priorities, best practices, risks that standout in a particular operation are constantly communicated; and
c) employees embrace and understand their responsibilities towards safety management;

These mechanisms have improved coordination and collaboration among different authorities involved with safety oversight within the State of Kuwait, enabling personnel, including decision maker, to have solid and harmonised understanding of:

a) SSP documentation, its associated policies, and procedures;
b) SSP operational strategies;
c) SPIs;
d) Safety performance information;
e) Organisational safety risks profiles;
f) Safety responsibility;
g) SMS requirements;
h) Lessons learned from accidents and incidents; and
i) Concepts and best practices of safety management.

Consolidation, communication and sharing of safety information amongst authorities involved in SSP is made using available communication means such, emails, e-publication notification, seminars, meetings, training, websites, workshops, mailing lists.

8.2 EXTERNAL COMMUNICATION AND DISSEMINATION OF SAFETY INFORMATION

Externally, the establishment of communication channels with service providers has always been through:

a) Effective SMS implementation, along with supply of guidance material for the implementation of SMS;
b) A system-wide positive safety culture with a particular stress on the importance of reporting;
c) Share and exchange of information such as lessons learned, best practices, SPIs, decisions or actions taken to improve aviation safety (e.g., establishing regulations or implementing changes to surveillance methods);
d) the provision of information on specific safety risks;
e) the increase of general awareness on aviation safety issues and the supply of safety training for the aviation community;
f) collaboration in identifying safety enhancement initiatives among service providers; and

g) promote the exchange of safety information:
h) with and among service providers; and
i) between States.

8.3 ASSESSMENT of the EFFECTIVENESS of the KUWAIT SAFETY COMMUNICATION PLAN

The Kuwait Safety Communication Plan shall be reviewed by the SSPCG every 12 months to assess the effectiveness of its safety promotion channels and media to ensure the internal and external communication are appropriate to convey each message to its targeted audience,

APPENDIX 1: STATE OF KUWAIT SAFETY POLICY STATEMENT

The Kuwait Directorate General of Civil Aviation (DGCA) promotes and regulates aviation safety in the State of Kuwait. as President of Civil Aviation, I am committed to develop and implement strategies, regulatory frameworks, and effective processes to ensure that aviation activities, under our oversight, reach the highest possible level of safety.

To this end, we will:

1) Develop the Kuwait Civil Aviation Regulations (KCASRs) to be in line and synchronised with the standards, recommended practices, and procedures of the International Civil Aviation Organization (ICAO).

2) Adopt a data and performance-based approach to safety regulation and oversight activities, as applicable.

3) Identify safety trends in the aviation industry and adopt a risk-based approach to address the areas of greatest safety concern or need.

4) Continuously control and measure safety performance in our aviation system through collective State indicators, and also through the safety performance indicators of service providers.

5) Collaborate and consult with the industry to address safety issues, and continuously improve aviation safety.

6) Encourage good safety practices and a positive institutional safety culture within the industry, based on sound safety management principles.

7) Encourage the collection, analysis, and exchange of safety information among all relevant industry organisations and service providers, with a view to using such information for safety management purposes only.

8) Clearly define for all regulatory personnel their responsibilities and accountabilities for the implementation, establishment and maintenance of the Kuwait State's Safety Program and its performance.

9) Assign sufficient financial and human resources for safety management and oversight and for the implementation and maintenance of the SSP

10) Ensure that all regulatory personnel are provided with adequate and appropriate aviation safety information and training, they are specialists in their functional areas and competent in safety regulation of service providers.

11) Continually improve the Kuwait State Safety Programme (SSP) to achieve ever higher safety performance targets, and

12) Ensure that all service providers and airport operators establish and maintain their own safety management system in their operation.

Abdullah Ali Al-Abdullah Al-Salem Al-Sabah
President of Civil Aviation

President of Civil Aviation
SSP Executive Accountable Manager

APPENDIX 2: STATE OF KUWAIT ENFORCEMENT POLICY

This enforcement policy is promulgated under the Amiri Decree No. (30) 1960, No. (06) 1994 and Ministerial Order No. (18) 1996, enabling the General Civil Aviation Authority (the Authority) to undertake the promulgation of general policy for civil aviation.

A.2.1 PURPOSE

A.2.1.1 Enforcement of compliance to civil aviation laws forms part of regulatory tools available to the Authority to create and sustain a safe and secure civil aviation system in the State. Enforcement action can be taken against non-compliance with the following prescripts:

a) Civil aviation primary laws;
b) Civil Aviation Regulations, including AMC, Safety Bulletins;
c) Safety Directives or other Directives issued by the Authority.

A.2.1.2 The State of Kuwait enforcement policy is aimed at promoting compliance with aviation safety regulations and requirements through enforcement functions in an equitable manner.

A.2.1.3 In order to achieve the above-mentioned aim, the enforcement policy is developed in such a way that it:

a) supports and encourages a positive safety culture; and
b) specifies the conditions and circumstances under which service providers with a safety management system (SMS) are allowed to deal with and resolve events involving certain safety issues internally, within the context of their SMS and to the satisfaction of the DGCA, provided that the SMS is in accordance with the SMS framework (i.e. established and maintained in accordance with KCASR 19) and shown to be effective and mature.

A.2.1.4 The enforcement policy applies to persons or service providers that are involved in civil aviation activities. The sources of information and safety data collected shall be protected and prevented for use or disclosure for purposes other than safety management.

A.2.2 DEFINITIONS

In this Policy, the following terms and expressions shall, unless otherwise required by the context, have the meanings set forth below:

a) "Criminal activity" means an act or omission which has a criminal element and which, according to the Amiri Decree No. (06) 1994, is punishable by a fine or imprisonment or both;
b) "gross negligence or reckless conduct" means an act or omission undertaken with a serious disregard or indifference to an obvious risk, regardless of whether the risk was fully appreciated by the actor;
c) "Wilful misconduct" means a wrongful act or omission which a person either knows to be wrongful or is indifferent to the question of whether it is wrongful or not.

A.2.3 POLICY

A.2.3.1 All applicable service providers (as per KCASR-19) are required to establish, maintain and adhere to an SMS that is commensurate with the size, nature and complexity of the operations authorised to be conducted under their approval/certificate.

A.2.3.2 The implementation of SMS requires the State of Kuwait to have an equitable and discretionary enforcement approach to support the SSP-SMS framework.

A.2.3.3 The State of Kuwait enforcement policies and procedures allows service providers to deal with, and resolve, certain events involving safety deviations, internally, within the context of the service provider's SMS, and to the satisfaction of the DGCA.

A.2.3.4 Contraventions involving gross negligence or reckless conduct and violations involving wilful misconduct, will be investigated by the DGCA and may be subject to conventional enforcement action where appropriate. Contraventions involving a criminal activity will be reported to the public prosecution.

A.2.3.5 To maintain an enforcement policy that supports the implementation of SMS, the DGCA will maintain an open communication channel with service providers.

The DGCA will ensure that no data and information derived from safety data collection and processing systems (established under an SMS and SSP) is used in a manner that contradicts the State of Kuwait Policy on Protection of Safety Data, Safety Information and Related Sources. The sources of information and

safety data collected for example from Voluntary Incident Reporting System shall be protected and prevented for use or disclosure for purposes other than safety management unless directed by Court Order.

A.2.3.6 The unintentional contraventions which are committed by a service provider personnel operating under an SMS, other than the ones mentioned in A.2.3.4, shall be dealt with under specific review procedures agreed with the DGCA in the individual service provider's SMS documentations.

This will allow service providers to deal with such contraventions internally without necessarily involving the DGCA.

A.2.3.7 Notwithstanding the procedures referred to in A.2.3.6, the DGCA inspectors shall have the right to access and review the information generated as a result of implementing the procedures.

A.2.3.8 This approach aims to nurture and sustain effective safety reporting, whereby service providers' employees can report safety deficiencies and hazards without fear of punitive action. A service provider can therefore, without apportioning blame and without fear of enforcement action, analyse the event and the organisational or individual factors that may have led to it, in order to incorporate remedial measures that will best help prevent recurrence.

A.2.3.9 The inspector will evaluate the corrective measures proposed by the service provider and/or the systems currently in place to address the event underlying the contravention.

A.2.3.10 If the corrective measures proposed are considered satisfactory and likely to prevent recurrence and foster future compliance, the review of the violation should then be concluded with no further punitive enforcement action by the DGCA.

A.2.3.11 In cases where either the corrective measures or the systems in place are considered inappropriate, the DGCA will continue to interact with the service provider to find a satisfactory resolution that would prevent enforcement action. However, in cases where the service provider refuses to address the event and provide effective corrective measures, an enforcement action or other administrative action will be considered.

A.2.3.12 Breaches of aviation regulations may occur for many different reasons, from a genuine misunderstanding of the regulations, to disregard for aviation safety. The State of Kuwait has a range of enforcement options to effectively address

safety obligations in light of different circumstances. A contravention may result in one or more of the following enforcement actions:

a) counselling.
b) remedial training.
c) warning letter.
d) variation, suspension, or revocation of authorisations; or
e) criminal prosecution.
f) Civil Penalties

A.2.3.13 In addition to A.2.3.12, the DGCA may forbid a person from flying in the territory of the State of Kuwait or from exercising the privileges of an aviation licence or other authorisation, for a specified period of time or indefinitely.

A.2.3.14 Because the State of Kuwait strives for advanced positive culture, a reconsideration process has been established to allow review of any decision made by Kuwait DGCA. A reconsideration can be lodged against an enforcement decision or the suspension or revocation of a licence, certificate, approval, or authorisation. For information, such provision also applies when a refusal of a licence, certificate, approval, or authorisation

A.2.4 PROPORTIONALITY OF RESPONSES

Enforcement decisions must be proportional to the identified breaches and the safety risks they underlie, based on three principles:

a) The DGCA will take action against those who consistently and deliberately operate outside civil aviation legislations and regulations;
b) The DGCA will seek to educate and promote training or supervision of those who show commitment to resolving safety deficiencies; and
c) The DGCA will give due and equitable consideration to distinguish premeditated violations from unintentional errors or deviations.

A.2.5 NATURAL JUSTICE AND ACCOUNTABILITY

A.2.5.1 Enforcement decisions must:

a) be fair and follow due process;
b) be transparent to those involved;
c) take into account the circumstances of the case and the attitude/actions of the service provider or individual when considering action;

d) be consistent actions/decisions for like/similar circumstances; and
e) be subject to appropriate internal and external review.

A.2.5.2 Enforcement decisions must not be influenced by:

a) personal conflict;
b) personal gain;
c) considerations such as gender, race, religion, political views or affiliation; or
d) personal, political or financial power of those involved.

A.2.6. EXCEPTIONS

A.2.6.1 The DGCA will not use the safety data or information submitted under safety data collection and processing systems for enforcement. However, the DGCA may consider an enforcement action for purposes of improving safety if investigations reveal that an occurrence may have been caused by an act or omission considered to be conduct constituting gross negligence, wilful misconduct or criminal activity.

A.2.6.2 Notwithstanding Clause A.2.6.1, the DGCA shall not be prevented from using safety data or safety information to take any preventive, corrective or remedial action necessary to maintain or improve aviation safety.

A.2.6.3 The protection of safety data and information and its sources against enforcement action does not apply if there is evidence of a deliberate effort to conceal non-compliance.

A.2.6.4 The handling of unintentional contraventions under the specific review procedures mentioned in Clause A.2.3.6 does not apply if a service provider is deemed by the DGCA as a recurrent violator.

Abdullah Ali Al-Abdullah Al-Salem Al-Sabah
President of Civil Aviation

(Signed) _____

President of Civil Aviation
SSP Executive Accountable Manager

APPENDIX 3: STATE of KUWAIT SAFETY OBJECTIVES

The State of Kuwait aims at achieving a high level of safety performance through effective implementation of safety management functions and oversight in order to achieve zero fatal accidents and to reduce the rate of serious incidents to as low as reasonably practicable, mitigate the key risks contained in the Global Aviation Safety Plan and those risks pertinent to the State of Kuwait operational environment.

To achieve this, The State of Kuwait will:

a) Implement a robust hazard identification and risk mitigation methodology to proactively arrest safety risks.
b) Continuously monitor safety performance at state level to ensure the effectiveness of the mitigations and to achieve an Acceptable Level of Safety Performance.
c) Build and improve its capabilities, capacities and skill sets necessary for an effective performance of its safety management and safety oversight functions.
d) Promote a positive safety culture in the civil aviation sector, share knowledge, lessons learned and exchange safety information within the State of Kuwait civil aviation sector and with external stakeholders.

The development of safety objectives starts with a clear understanding of major safety risks in the aviation system of the State. Aviation safety risk is influenced by many different factors, such as the size and complexity of the aviation system, as well as the operating environment. The development of a good description of the system will provide good training and understanding.

Safety objectives are brief, high-level statements of safety achievements or targets to be achieved. They serve as guidance for organizational activities and, therefore, must be aligned with the safety policy that sets the high-level safety commitments of the organisation. They also help to communicate safety priorities to the aviation community in general.

Safety objectives provide guidance for the development of safety performance indicators (SPIs) and safety performance targets (SPTs). The establishment of safety objectives for safety performance management provides guidance on the use of resources and the conduction of organisational activities for SPI oversight and measurement of SPT status.

Safety objectives may be:

- ✓ process-based, that is, established in terms of safe behaviours expected from operational personnel, or action taken by the organisation for safety risk management; or

- ✓ result-based, that is, they can cover actions and trends concerning containment of operational accidents or losses.

Safety objectives should combine process-based and result-based safety objectives in order to provide effective guidance for SPIs and SPTs.

An example of a process-based safety objective relevant to the SSP—regarding a safety intervention— would be "the State of Kuwait will implement an online safety reporting programme by dd/mm/yyyy."

An example of a result-based safety objective relevant to the SMS—related to containment of operational loss—would be "the airport operator should reduce the annual number of adverse apron safety-related events compared to the previous year."

Safety objectives support the identification of State SPIs and SPTs and subsequent establishment of the acceptable level of safety performance (ALoSP). Safety objectives work together as a package with SPIs and SPTs to enable the State to monitor and measure its safety performance.

Once the SSP has been implemented, the State should periodically assess its identified safety risks by analysing the safety data generated by the SSP. This analysis will also help identify emerging issues. The State should also review periodically its progress towards the achievement of its safety objectives and their continuing relevance, taking into account any reassessment of current risks.

A.3.1. SAFETY OBJECTIVES RATIONALE

A.3.1.1 The State of Kuwait has established safety objectives based on the key risks in the aviation system. This begins with considering the GASP top priorities of LOC-I, Runway events and CFIT which are also cascaded to the regional safety plans originated by RASG MID. For details of the Kuwait National Aviation Safety Plan - CAP 102.

Moreover, in order to identify key risks, identifying hazards is an essential part of a Safety Management in any organisation. It is understood that hazards shall always be in any aviation activity and will have the potential to cause aircraft

incidents or accidents. As such, the State of Kuwait has developed Hazard Identification processes and systems to address the issues and communicate them to external stakeholders.

The State of Kuwait uses the safety reports and trend analysis available to it, as well as outcomes of accidents and serious incidents investigations, or deficiencies discovered through audits as sources to develop objectives. These activities may generate information about key risks or trends that may need attention and monitoring.

The State of Kuwait has established operational plans and internal audits and reviews to identify areas in need of improvement and to targets areas that will assist in achieving the safety objectives accordingly. For example: inspector competency assurance activities, training inspectors on SMS and SMS audit, filing of differences, surveillance plans, rulemaking and safety promotion activities are all activities that will help in increasing the overall level of safety, thereby serving the safety objectives.

Based on the above, the State of Kuwait safety objectives can be divided into two categories: outcome oriented (primary) and process oriented (secondary).

A.3.1.2 For the outcome-oriented objectives (High level and Low level, the following areas are targeted for reduction in rates:

A.3.1.2.1 **Flight Operations:**

- Number of accidents in Commercial Air Transport Operations- Scheduled/Air Carriers.
- Number of accidents in Commercial Air Transport Operations-Non-scheduled (Aeroplanes).
- Number of accidents in Commercial Air Transport Operations-Non-scheduled (Helicopters).
- Number of serious incidents in Commercial Air Transport Operations-Scheduled (Air Carriers).
- Number of serious incidents in Commercial Air Transport Operations-Non-scheduled (Aeroplanes).
- Number of serious incidents in Commercial Air Transport Operations-Non-scheduled (Helicopters).
- Loss of Control Inflight LOC-I.
- Controlled Flight into Terrain CFIT.
- Runway events (excursion/incursion).
- Fire/Smoke/Fumes (FIRE).

- Airprox/ACAS alert/loss of separation/ (near) Mid-Air-Collision (MAC).
- Ground collision and ground handling events.

A.3.1.2.2 **Aerodromes and Air Navigation (High Level and Low Level):**

- Airborne Separation Minima Infringement – ASMI.
- Level Bust.
- Runway Incursions.
- Runway Excursions
- Loss of Runway Separation.
- Manoeuvring Area Excursion.
- FOD incidents.
- Bird and Wildlife.
- Taxiway Incursions.
- Damage to Aircraft.

A.3.1.2.3 **Airworthiness:**

- Maintenance Interval Exceedance (CAMO) Air Carrier.
- Maintenance Interval Exceedance (CAMO) Air Transport.
- Maintenance Error - Line Maintenance.
- Maintenance Error - Base Maintenance.

A.3.1.3 For process-oriented objectives (safety enhancement initiatives aiming at overall improvement of safety) the following areas are targeted:

- Promotion of safety culture through execution of Safety promotion / information sharing.
- Activities and workshops (internal and external).
- Completion of filing of differences with ICAO standards.
- Training personnel on SMS and SSP.
- Implementation of risk-based surveillance.
- Building analytical and investigative capabilities.
- Continuous improvement of safety management standards.
- Performance of Internal audits.
- Publication of safety reports and sharing of safety information.
- Surveillance activities.

A.3.2 SAFETY PLAN ACTIONS

The actions contained in the State of Kuwait NASP are targeted towards the achievement of the outcome-oriented safety objectives, managing emerging issues and identifying trends of interest.

In order to devise action plans, a Safety Enhancement Initiatives (SEI) and actions are adopted with target for the objectives is set. For the outcome-based objectives, the safety performance targets form a part of the State of Kuwait ALOSP. Each objective has a target assigned to it. The individual targets are monitored on quarterly basis and alert levels are set. Kuwait DGCA and the service providers agree on the necessary actions to ensure that the targets are met.

The SSPCG monitors the overall performance, proposes revisions to objectives and targets and reports performance issues to the higher management.

The process-oriented objectives of the State of Kuwait do not form a part of the ALOSP as there is no direct relationship between them and the outcome-oriented objectives. Their importance in achieving a higher level of safety standards is recognised. They are contained in the DGCA annual operational plans, training plans and audit plans which do contribute to the overall improvement of safety.

A.3.2.1. State of Kuwait ALOSP**:**

The following targeted areas are verified by the State of Kuwait through inspections and audits performed against the service providers and the continuous safety reporting and the quarterly SPT reports of individual service providers. Triggers levels are established or have a criteria value for a particular safety performance indicator that serves to initiate an action required.

Flight Operations Domain related SPIs:

Fire/Smoke/Fumes (FIRE) per 100,000 Flight Hours.

Uncontrolled fire on board an aircraft, especially when in flight, represent one of the most severe hazards in aviation. In-flight fire can ultimately lead to loss of control, either as a result of structural or control system failure, or again as a result of crew incapacitation. Fire on the ground can take hold rapidly and lead to significant casualties if evacuation and emergency response is not swift enough. Smoke or fumes, whether they are associated

with fire or not, can lead to passenger and crew incapacitation and will certainly raise concern and invite a response. Even when they do not give rise to a safety impact, they can give rise to concerns and need to be addressed.

The State focuses on the following precursors to act upon LOC-I incidents:

- Engine fire
- Fire/smoke/fumes

202x Target: <x.xx /100 000 FH

Existing Controls:

1. Regulations (cabin crew training)
2. Continuing Oversight (Enroute Inspections)
3. Quarterly review of Operator SPI performance
4. Individual operators' mitigations in agreement with the DGCA
5. Fire prevention measures (dangerous goods)

Additional Controls: None

Loss of Control – inflight (LOC-I) per 100,000 Flight Hours.

The EPAS 2017-2021 states that Loss of control usually occurs because the aircraft enters a flight regime which is outside its normal envelope, usually, but not always, at a high rate, thereby introducing an element of surprise for the flight crew involved.
Events such as a deviation from flight path, abnormal airspeed or triggering of stall protections when not dealt with properly can lead to fatal consequences involving many fatalities. Technical failures as well as ground handling issues can be also a precursor of this type of scenarios.

The State focuses on the following precursors to act upon LOC-I incidents:

- Excessive roll attitude or roll rate (Increased roll attitude or rate).
- Stall warning/stick shaker.
- Excessive speed/vertical speed/accelerations (vertical or configuration).
- Low go-around or rejected landing (go-around).
- High pitch angle.
- Failure of primary flight instruments.
- Laser attacks.

202x Target: $\leq$ x.xx/100 000 FH

Existing Controls:

1. Upset Prevention and Recovery Training (UPRT) regulations in KCASR 6
2. Inclusion of LOC-I in the FDM programmes
3. Individual operators' mitigations in agreement with Kuwait DGCA
4. Quarterly review of Operator SPI performance

Additional Controls: None

Controlled Flight into or toward terrain (CFIT) per 100,000 Flight Hours.

Inflight collision or near collision with terrain, water, or obstacle without indication of loss of control. The following precursor indicators are set as mean to monitor this objective:

- EGPWS hard warnings
- Descent below MSA
- Navigation errors

202x Target: < x.xx /100 000 FH

Existing Controls:

1. Mandating EGPWS/ TAWS in KCASR 6
2. Inclusion of CFIT in operators FDM programmes
3. Individual operators' mitigations in agreement with Kuwait DGCA
4. Quarterly review of Operator SPI performance

Additional Controls: None

Runway Excursion (RE) and Runway Incursion per 100,000 Flight Hours.

Following are precursors:

- High speed rejected take-off
- Take-off with abnormal configuration
- Unstable shortly before landing
- Abnormal runway contact/Hard or heavy landing
- Loss of control on ground
- Long or fast landings.
- Landing gear and braking system related occurrences
- Signage and marking
- Runway and taxiways lightings
- ATC instructions and procedures

- Adverse weather operations
- Night operations

202x Target: < x.xx /100 000 FH

Existing Controls:

1. Inclusion of runway Excursion in the operators FDM
2. Individual operators' mitigations in agreement with Kuwait DGCA
3. Quarterly review of Operator SPI performance

Additional Controls: None

Airprox/ACAS alert/loss of separation/ (near) Mid-Air-Collision (MAC) per 100,000 Flight Hours.

Following are precursors:

- TCAS/ACAS Resolution Advisory
- Losses of separation
- Level Busts
- Airspace infringements

202x Target: < xx.xx/100 000 FH

Existing Controls:

1. Mandating TCAS/ ACAS in KCASR 6.
2. Individual operator's mitigations in agreement with the DGCA.
3. Quarterly review of Operator SPI performance.

Additional: None

Ground Collision (GCOL) and Ground handling (RAMP) per 100,000 Flight Hours.

Following are precursors:

- Taxiway incursions
- Avoiding manoeuvres during taxi
- Aircraft collisions and collisions with aircraft
- Loading errors

202x Target: < xx.xx /100 000 FH

Existing Controls:

1. Surface Movement Guidance and Control System (SMGCS)
2. Stations inspections.
3. Quarterly review of Operator SPI performance
4. Oversight of operator responsibilities towards ground handling.

Additional Controls: None

Air Navigation and Aerodrome Domain related SPTs:

As mentioned above, the outcome-oriented objectives are related to the State's ALoSP. Service Providers submit data quarterly to ASD department. The results from the individual organisations are collated to determine annual ALoSP and Safety Performance Targets (SPT) for selected Safety Performance Indicators (SPI).

Following are the high and low level SPTs for which ASD is responsible for.

Airborne Separation Minima Infringement (ASMI) per 100,000 Movements

Whenever an incident in which a reduction for required separation occurs during the airborne phase of flight in the controlled airspace, where the separation has fallen to:

- Remaining 25% or less, regardless of whether or not corrective action to avoid collision was taken.
- Remaining 26 – 50% of the required minimum and no ATC action is taken or the initial action was determined by the pilot or ACAS to resolve.
- Remaining 26 – 50% of the required minimum and ATC resolved the situation.
- Remaining 51 – 75% of the required minimum and no ATC action is taken or the initial action was determined by the pilot or ACAS to resolve.
- Remaining is 51 up to but not including 90% of the required minimum and ATC resolved the situation.
- Remaining is 76% or more and pilot or ACAS resolved the situation.
- Remaining is 90% or more where ATC resolved the situation.

202x Target: x.xx

Existing Controls:

- Monthly analysis of incident data to identify common procedures, errors, habits and external threats that are causal factors
- ATCO Continuation Training
- Regular organisational ATC safety briefings
- Organisational Safety Bulletins/Newsletters to staff

- Sharing of incident data & mitigations – regular Operator-ATC Safety liaison meetings
- Organisational NOSS to identify additional Threat and Error Management Factors (TEM)
- ATS unit working with Operator training department to produce common safety campaigns and training materials such as acceptable radiotelephony phraseology
- ATCOs attendance to Operator CRM Course to promote a better understanding and appreciation between pilots and ATCOs
- Increased availability of Mode S readouts to controllers (ATCO can see the altitude pilot has entered in navigation system)

Additional Controls: None

Remarks: within target

Level Bust per 100,000 Movements

This is specified as an incident where an aircraft deviated from the assigned flight levels, but there was no loss of separation.

202x Target: x.xx

Existing Controls

- Monthly analysis of incident data to identify common procedures, errors, habits and external threats that are causal factors
- ATCO Continuation Training including readback/hearback error prevention
- Regular organisational ATC Watch safety briefings
- Organisational Safety Bulletins/Newsletters to staff
- Sharing of incident data & mitigations – regular Operator-ATC Safety liaison meetings
- Organisational NOSS to identify additional Threat and Error Management Factors (TEM)
- ATS unit working with Operator training department to produce common safety campaigns and training materials such as acceptable radiotelephony phraseology
- ATCOs attendance to Operator CRM Course to promote a better understanding and appreciation between pilots and ATCOs
- Increased availability of Mode S readouts to controllers (ATCO can see the altitude pilot has entered in navigation system)
- TCAS requirement
- Reduction of crossing points for climbing/descending aircraft
- Use of “holding window” software for ACC controllers

Additional Controls: Declaration of National Targeted Risk Area (NTRA) for greater emphasis on this safety-critical area

Remarks: Within Target

Loss of Runway Separation per 100,000 Movements

Incidents when the reduction in required runway separation occurred where a collision was narrowly avoided by:

- Corrective action or evasive response.
- Significant potential for collision may result in a time critical evasive response to avoid a collision.
- There is ample time or distance to avoid a potential collision whether by the ATC or determined by the Pilot.

202x Target x.xx

Existing Controls:

- Monthly analysis of incident data to identify common procedures, errors, habits and external threats that are causal factors
- ATCO Continuation Training including RRSM
- Regular organisational ATC safety briefings
- Organisational Safety Bulletins/Newsletters to staff
- Sharing of incident data & mitigations – regular Operator-ATC Safety liaison meetings
- Organisational NOSS survey to identify additional Threat and Error Management Factors (TEM)
- ATS unit working with Operator training department to produce common safety campaigns and training materials such as acceptable radiotelephony phraseology
- ATCOs attendance to Operator CRM Course to promote a better understanding and appreciation between pilots and ATCOs
- Use of timers and strict procedures for take-off and landing minima
- Increased supervision in busier towers to ensure adequate operational oversight particularly during use of Reduced Runway Separation Minima (RRSM)

Additional Controls: Declaration of National Targeted Risk Area (NTRA) for greater emphasis on this safety-critical area.
Remarks: Within Target

Runway Incursions per 100,000 Movements

Defined as an occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft, where any of the following occurred:

- Serious incident or collision was narrowly avoided.
- Significant potential for collision, which may result in time critical evasive response to avoid a collision.
- An incursion characterised by ample time and/or distance to avoid a collision.
- No immediate safety consequences.

202x Target: x.xx

Existing Controls:

- Monthly analysis of incident data to identify common procedures, errors, habits and external threats that are causal factors
- ATCO Continuation Training including runway incursion prevention
- Regular organisational ATC safety briefings
- Organisational Safety Bulletins/Newsletters to staff
- ATCOs attendance to Operator CRM Course to promote a better understanding and appreciation between pilots and ATCOs
- Introduction of driver training simulators
- Ground Movement Radar (GMR) upgrades
- Safety Days for Driver Training and Apron Safety
- Expansion of Follow the Greens concept
- Establishment of Local Runway Safety Team for each aerodrome
- Organisational participation in National Runway Safety Team meetings
- Identification and review of Hot Spots
- Improvements in recording and tracking of reports
- Harmonisation of stop bars guidance material
- Lighting, markings, signage reviewed during periodic surveillance audits
- Individual service providers SPM mitigation plans agreed with the DGCA
- Enhanced taxiway markings
- Use of LED lighting
- “Runway Ahead” paint markings

Additional Controls: None

Remarks: Within Target

Manoeuvring Area Excursion per 100,000 Movements

This covers all incidents in which an aircraft had an excursion from a runway or taxiway – i.e. overruns, excursions off the side of the runway or taxiway, where the result was either damage to the aircraft or not.

202x Target x.xx

Existing Controls:

- Monthly analysis of incident data to identify common procedures, errors, habits and external threats that are causal factors
- ATCO Continuation Training including unsterilized approach
- Regular organisational ATC safety briefings
- Organisational Safety Bulletins/Newsletters to staff
- Runway surface friction monitoring and maintenance
- Annual pavement management surveys
- Taxiway fillets
- Blue edge lights on taxiway curves
- Promulgation of runway status via ATIS/NOTAM
- Accurate and timely reporting of ambient weather conditions by ATC
- Approved low visibility procedures
- Individual service providers SPM mitigation plans agreed with the DGCA

Additional Controls: None
Remarks: Within Target

FOD per 100,000 movements

202x Target: x.xx

Existing Controls

- Inspections
- Induction and training programmes
- FOD Inspection Schedule
- Promotional campaigns
-

Additional Controls: None
Remarks: Within Target

Bird and Wildlife per 100,000 movements

202x Target: xx.xx

Existing Controls

- Training
- Habitat management
- Wildlife management plans
- Surveys of wildlife concentrations of aerodrome

Additional Controls: None
Remarks: Within Target

Damage to Aircraft per 100,000 movements

202x Target x.xx

Existing Controls:

- Turnaround audits
- Enhanced SOP's,
- Vehicle and equipment check.

Additional Controls:

- SMS audits
- violation scheme (including reward incentives);

Remarks: Within Target

Taxiway Incursions per 100,000 movements

202x Target xx.xx

Existing Controls:

- Local Runway Safety Team
- Now monitoring as SPI
- Training
- Incident investigations
- Additional signage/markings to enhance hotspots,
- Promulgation of hotspot charts
- Low Visibility Procedures

Additional Controls: full signage and designation review at Kuwait International Airport
Remarks: Within Target

Airworthiness Domain related SPTs:

- Maintenance Interval Exceedance (CAMO) Air Carrier per 100,000 Flight Hours.
- Maintenance Interval Exceedance (CAMO) Air Transport per 100,000 Flight Hours.
- Maintenance Error - Line Maintenance per 100,000 Departures.
- Maintenance Error - Base Maintenance per 100,000 Productive Man Hours.

Existing controls:

- KCASR requirement on service providers for the analysis of incident data to identify common causal factors related to procedures and habits to develop effective risk controls
- KCASR requirements for establishing maintenance programmes and compliance with mandatory maintenance requirements.
- Annual Audits
- CAMO and AMO Safety Information Exchange Working Groups
- Individual service providers SPM mitigation plans agreed with Kuwait DGCA
- Targeted surveillance activities
- Continual review of the Organisation's procedures.

Actions to be taken when SPT(s) are not met:

If any of the SPTs is not met, an evaluation may be done by the SSPCG to better understand why and to determine what actions should be taken. It could be because:

a) The targets were not achievable or realistic;
b) The actions taken to achieve the target were not appropriate or deviated from the original intent (practical drift);
c) changes in other safety risk priorities diverted resources away from meeting a particular target; or
d) Emerging risks occurred that had not been considered when the targets were set.

The evaluation will be directed to understand root causes and for a management decision on whether the safety improvement is sufficient even if the target has not been met, and what further actions are required. This may require additional analysis that could identify some risk factors that were not addressed or maybe some risk mitigations in place that are not effective.

A.3.3 SSP IMPLEMENTATION

A.3.3.1 SSP implementation will be consistent with the legislative framework of the State of Kuwait and will be supported by the initiatives and guidelines of the GASP.

A.3.3.2 In order to make improvements to the safety system, the State of Kuwait will take into account the following critical factors:

- ✓ continuous dialogue among the regulatory and administrative bodies of the State that are part of the SSP, the industry, and the community in general;
- ✓ synchronisation of infrastructure and equipment investments by the State and the industry, so that stakeholders may derive safety and efficiency benefits;
- ✓ support to international and regional harmonisation;
- ✓ knowledge of the regulation and management of an airspace in which aircraft of different capabilities operate; and
- ✓ a clear regulatory policy and deadlines so that State entities and the industry may have greater certainty and capacity to plan when changes occur.

A.3.3.3 The State of Kuwait will gradually introduce performance-based regulations and risk-based systems and approaches for safety oversight to replace prescriptive regulations and oversight.

A.3.3.4 The transition to a performance-based approach, pose a challenge to the organisations responsible for aviation safety and the industry in terms of the impact on the respective roles, responsibilities, and the allocation of resources.

A.3.3.5 Given the fast pace of change in aviation, the State of Kuwait will mainly focus on its objectives for 2020, 2025, 2028, and 2030. However, the indicators, targets, and alert levels will be calculated annually in the State safety plan.

A.3.4 FUTURE CHALLENGES and PRIORITIES

An overview of the key objectives of the State of Kuwait to meet future challenges and priorities is shown below.

A.3.4.1 For 2020 and beyond

- ✓ implement a sustainable SSP;
- ✓ reduce accident rates and numbers and fatalities by 10% in all aviation segments;

- ✓ improve effective implementation (EI) to XX %
- ✓ regional collaboration;
- ✓ Use of industry programmes
- ✓ Availability of the appropriate infrastructure to support safe operations
- ✓ implement the requirements set by DGCA concerning aircraft upset prevention and recovery training (UPRT);
- ✓ implement the requirements set by DGCA concerning ACAS II, Version 7.1;
- ✓ implement the requirements set by DGCA regarding the flight data analysis programme (FDAP) in air service operators operating aircraft over 27 000 kg;
- ✓ further promotion by DGCA on voluntary implementation of a flight data analysis programme (FDAP) in commercial aviation, corporate aviation, general aviation, training aviation, and aviation operators operating aircraft over 5 700 kg.
- ✓ implement the requirements set by DGCA concerning GNSS-based navigation and ADS-B surveillance.
- ✓ The State of Kuwait will continue cooperating with the ICAO RASG-MID, and the international aeronautical authorities to improve aviation safety management approaches.
- ✓ The DGCA will implement mitigation measures to resolve the findings in its SMS concerning conflict detection and changes in air routes.
- ✓ When developing new regulations and requirements, DGCA will take into consideration that any regulatory change should be based on safety risk rather than on prescriptive requirements that impose unnecessary costs on the industry.
- ✓ The classification of aircraft operations will be aligned with the ICAO model.
- ✓ Risk profiling of the aviation industry of the State of Kuwait will continue in order to identify the specific risks of the sector and joint risk mitigation plans to manage aviation safety performance.
- ✓ Applying a risk-based approach, an analysis will be made of oversight policy, procedures, and capacity concerning:
- ➢ the unmanned aircraft system (UAS) industry and operators;
- ➢ maintenance providers abroad that provide services to aircraft registered in the State of Kuwait;
- ➢ helicopter operations in the high seas; and
- ➢ surveillance of operations conducted by air service operators of foreign aircraft and the associated permits.

- ✓ In accordance with the ICAO Global air navigation plan, the State of Kuwait will extend the use of PBN (such as performance-based navigation and ground-based augmentation systems with approved ADS-B avionics).

A.3.4.2 By 2025

- ✓ implement an effective SSP;
- ✓ reduce accident rates and numbers and fatalities by 10% in all aviation segments;
- ✓ Increase effective implementation (EI) to XX %
- ✓ Regional collaboration
- ✓ Use of industry programmes
- ✓ Availability of the appropriate infrastructure to support safe operations

A.3.4.3 By 2028

- ✓ Increase effective implementation to 95%; and reduce accident rates and numbers and fatalities by 10% in all aviation segments;
- ✓ Regional collaboration
- ✓ Use of industry programmes
- ✓ Availability of the appropriate infrastructure to support safe operations

A.3.4.4 By 2030

- ✓ maintain effective implementation (EI) at 95% and improve it.
- ✓ achieve by 2030 a consecutive 3-year period without fatalities in aircraft accidents and maintain zero fatalities thereafter;
- ✓ reduce accident rates and numbers and fatalities by 10% in all aviation segments;
- ✓ Regional collaboration
- ✓ Use of industry programmes
- ✓ Availability of the appropriate infrastructure to support safe operations

A.3.5 TREND MONITORING

A.4.5.1 Other Trend Monitoring In addition to monitoring the outcome-oriented objectives, Kuwait DGCA, based on data derived from its occurrence reporting system is monitoring the following for abnormal and emerging trends every quarter. These trends may need management through the Safety Issue Action Management process or through the NASP. These trends and issues are identified as the following (it is to be noted that these issues could re-occur during each quarter or may not, based on various issues such as but not being limited to a sudden increase in the number of reports received within a short time period, whether they were captured through our trend analysis, were they identified through the Hazard Identification and Risk Management Process:

- Unsterilized / Missed Approaches
- Aircraft related regulatory event/issue
- Damage to Aircraft (Flight Operations)
- Flight Preparation
- Turbulence encounters
- Reoccurring laser Interferences from a specific state.
- De-icing procedures
- GNSS Interferences
- Communications Flight crew/ANS

A.3.5.2 Emerging issues

Emerging issues are about attempting to anticipate issues that may pose a threat to different areas of aviation in the near future or later. They often concern changes in the operating environment. The change may be associated with the advancement of technology, new operating methods, phenomena as climate change. Increasing attention must be paid to environmental issues in aviation and their reconciliation with safety issues in the future. The State of Kuwait, similar to European practices has identified key target areas for actions to improve safety with regards to drones' operations, security risks that affect aviation safety, new business models (NMB) as well as new products, systems, technologies and operations.

UAS/Drone Activities:
The UAS/drone industry is diverse, innovative and international. It has an enormous potential for growth with the associated possibility to create jobs. To ensure a safe, secure and environmentally friendly development, and to respect the citizens' legitimate concerns for privacy and data protection, DGCA has developed a regulatory framework for UAS/drone operations in the State of Kuwait. This includes introducing Laws and

Regulations that govern such activities, setting requirements for users that what must be obtained and followed before engaging in this activity and providing the permitted flying zones to these users.

Risks Arising from Conflict Zones:
The Middle East and gulf region is a hotspot due to numerous conflict zones that exist and some are in close proximity to the Sate of Kuwait. The State of Kuwait is monitoring current regional developments and has called upon its air operators to evaluate and avoid flight paths which are affected due to conflict zones or restrictions. Kuwait DGCA is working closely with the relevant authorities with regards to its flight operation, furthermore monitoring NOTAMs issued by other states and judge whether further changes to flight paths would be required.

END