

MINISTRY OF TRANSPORT

THE SOCIALIST REPUBLIC OF VIETNAM

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CIRCULAR

ELABORATING MANAGEMENT AND OPERATION OF AIRPORTS AND AERODROMES

Pursuant to the Law of Vietnam Civil Aviation No. 66/2006/QH11 dated June 29, 2006 and the Law on Amendments to certain Articles of the Law of Vietnam Civil Aviation No. 61/2014/QH13 dated November 21, 2014;

Pursuant to the Government's Decree No. 66/2015/ND-CP dated August 12, 2015 on aviation authorities;

Pursuant to the Government's Decree No. 12/2017/ND-CP dated February 10, 2017 defining the functions, tasks, powers and organizational structure of the Ministry of Transport;

Pursuant to the Government's Decree No. 05/2021/ND-CP dated January 25, 2021 on management and operation of airports and aerodromes;

At the request of the Director General of Transport Infrastructure Department and the Director General of the Civil Aviation Authority of Vietnam;

The Minister of Transport hereby elaborates the management and operation of airports and aerodromes.

Chapter I

GENERAL

SECTION 1. SCOPE AND REGULATED ENTITIES

Article 1. Scope and regulated entities

1. This Circular elaborates the management and operation of airports and aerodromes that serve civil aviation in Vietnam.

2. This Circular applies to organizations and individuals concerning civil aviation activities in the airports and aerodromes of Vietnam and does not apply to the management and operation of special-use aerodromes.

Article 2. Definitions

For the purposes of this Circular, the terms below shall be construed as follows:

1. “runway condition report (RCR)” means a comprehensive standardized report relating to runway surface condition and its effect on the aeroplane landing and take-off performance.
2. “series of slots” means a set of slots for the same time and same days of the week over a period of at least 05 weeks.
3. “runway strip” means a defined area including the runway and stopway, if provided, intended to reduce the risk of damage to aircraft running off a runway and protect aircraft flying over it during take off or landing operations.
4. “taxiway strip” means an area including a taxiway intended to protect an aircraft operating on the taxiway and to reduce the risk of damage to an aircraft accidentally running off the taxiway.
5. “stopway” means a defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.
6. “dolly” means a specialized cart in the aviation industry used to transport cargo pallets or boxes that does not contain baggage or cargo and operating in the air operations area (hereinafter referred to as “AOA”).
7. “runway” means a defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
8. “service road” means an established surface route on the movement area meant for the exclusive use of vehicles.
9. “taxiway” means a defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another.
10. “hot spot” means a location on an airport movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots and drivers is necessary.
11. “Slot Coordination Committee” means a council that coordinates the take-off and landing times of aircrafts at airports and aerodromes in Vietnam.
12. “clearway” means a defined rectangular area on the ground or water under the control of the appropriate entity, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.

13. “Runway End Safety Area (RESA)” means an area symmetrical about the extended runway center line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.
14. “maneuvering area” means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.
15. “movement area” means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the maneuvering area and the apron(s).
16. “season” means the summer season commencing on the last Sunday in March or the winter season commencing on the last Sunday in October.
17. “historic baseline date” means the reference date used to determine historic precedence, being on 31 January (summer) and on 31 August (winter).
18. “threshold” means the beginning of that portion of the runway usable for landing.
19. “specialized aviation vehicle” means a vehicle that operates in the restricted area and on internal airport road to serve directly an airport’s or aerodrome’s activity.
20. “apron” means a defined area intended to accommodate aircraft for purposes of loading or unloading passengers, baggage, mail or cargo; fueling; catering; technical service or maintenance.
21. “slot” means the planned on-block (arrival) and off-block (departure) times of an aircraft on a specific date serving as a permission to use the full range of airport infrastructure necessary to arrive at or depart from an airport.
22. “marking” means a symbol or group of symbols displayed on the surface of the movement area in order to convey aeronautical information.
23. “runway surface condition(s)” means a description of the condition(s) of the runway surface used in the runway condition report.
24. “coordination parameter” means an index intended to coordinate slots and calculated according to the maximum number of flights to and from an airport within a certain time frame and the number of aircraft stands.
25. “Asia/Pacific regional guidance on aerodrome operations personnel competency requirement framework” means the ICAO’s guidance on aerodrome operations personnel competency requirement framework.
26. “aircraft stand” means a designated area on an apron intended to be used for parking an aircraft.

Article 3. Abbreviations

For the purposes of this Circular, the abbreviations below shall apply:

1. “A-CDM” stands for Airport Collaborative Decision Making.
2. “ACI” stands for Airports Council International.
3. “ASDA” stands for Accelerate-Stop Distance Available.
4. “CTOT” stands for Calculated Take-off Time.
5. “FIR” stands for Flight Information Region.
6. “ICAO” stands for International Civil Aviation Organization.
7. “IATA” stands for International Air Transport Association.
8. “IGOM” stands for IATA Ground Operations Manual.
9. “ILS” stands for Instrument Landing System.
10. “LDA” stands for Landing Distance Available.
11. “PANS” stands for Procedures for Air Navigation Services.
12. “RESA” stands for Runway End Safety Area.
13. “TODA” stands for Take-Off Distance Available.
14. “TOBT” stands for Target Off-block Time.
15. “TORA” stands for Take-Off Run Available.
16. “TSAT” stands for Target Start-up Approval Time.
17. “VDGS” stands for Visual Docking Guidance Systems.
18. “WGS” stands for World Geodetic System.

SECTION 2. GENERAL REQUIREMENTS FOR MANAGEMENT AND OPERATION OF AIRPORTS AND AERODROMES

Article 4. Aerodrome infrastructure and facilities and technical infrastructure serving air navigation

1. Aerodrome infrastructure and facilities and technical infrastructure serving air navigation shall be built, installed and operated synchronously according to ICAO standards, applicable standards and technical regulations.

2. Investors or units assigned by the investors to manage projects on construction, renovation and upgrade of runways, taxiways and aprons shall determine main specifications of the runways, taxiways and aprons, aircraft parking configurations and other necessary specifications in the projects in order for the Civil Aviation Authority of Vietnam (hereinafter referred to as “CAAV”) to publish them on the aeronautical information publication on schedule as prescribed.

3. Main specifications, operation plans and aircraft parking configurations of airports and aerodromes are specified in Clauses 4 through 7 of this Article. The CAAV shall publish main specifications, operation plans and aircraft parking configurations of airports and aerodromes on the aeronautical information publication according to ICAO’s regulations on publication of aeronautical information.

4. Main specifications of a runway include:

- a) Designation of the runway;
- b) Length and width of the runway;
- c) Length and width of the runway’s shoulders;
- d) Runway strip, runway end safety area, stopway and clearway;
- dd) Runway threshold coordinates (WGS-84);
- e) Vertical slope of the runway;
- g) Horizontal slope of the runway;
- h) Runway weight bearing capacity (pavement classification number PCN, PCR);
- i) Types of coating of runway pavement surface and shoulders;
- k) Friction coefficient;
- l) Distances disclosed: TORA, TODA, ASDA, LDA.

5. Main specifications of a taxiway include:

- a) Designation of the taxiway;
- b) Length and width of the taxiway;

- c) Length and width of the taxiway's shoulders;
- d) Vertical slope of the taxiway;
- dd) Horizontal slope of the taxiway;
- e) Taxiway weight bearing capacity;
- g) Type of coating of taxiway pavement surface;
- h) Taxiway strip.

6. Main specifications of an apron include:

- a) Designation of the apron;
- b) Length and width of the apron;
- c) Length and width of the taxiway's shoulders;
- d) Slope of the apron;
- dd) Apron weight bearing capacity;
- e) Type of coating of apron pavement surface.

7. Operation plan and aircraft parking configuration include:

- a) Procedures for operation of aircrafts on runways, taxiways and aprons;
- b) Diagram of painted markings of runways, taxiways, aprons and aircraft stands;
- c) Coordinates of aircraft stands and aircraft surface movement guidance indicators (according to WGS-84);
- d) Types of aircraft for each stand;
- dd) Operation procedure and service plan for each stand (if any).

8. Airport or aerodrome operators must provide follow-me services at the request of the aircraft operators. Where an airport or aerodrome has yet to fully satisfy standards for aircrafts' automatic and safe rolling to aircraft stands or the result of hazard identification and risk assessment indicates that it is necessary to intensify adoption of the stand guidance method to maintain operational safety, the operator of such airport or aerodrome shall provide gratis the follow-me service, and prepare a plan for aerodrome infrastructure renovation.

9. Aircraft maintenance and repair areas shall be located in isolation from passenger and cargo terminals to minimize impacts of the noise, exhaust and fuel on the terminals. The person managing and operating the apron serving aircraft maintenance and repair shall carry out inspection and satisfy operational conditions; take measures to reduce aircraft engine emissions and noise during aircraft engine testing; operate a system for collection and treatment of wastewater, waste oil and other hazardous wastes in accordance with environmental regulations at the airport or aerodrome.

10. The operation of aircrafts at airports and aerodromes shall accord with the published weight bearing capacity of runways, taxiways and aprons.

11. The weight bearing capacity of runways, taxiways and aprons and surface friction coefficient of runways shall be measured and published in the aeronautical information publication and aerodrome operation literature.

12. Where the requirements for measurement of the weight bearing capacity and friction coefficient aircrafts have been specified in the project on runway, taxiway and apron construction, upgrade and renovation, the airport or aerodrome operator shall:

a) measure the weight bearing capacity of the runways, taxiways and aprons in the case of construction, upgrade and renovation; carry out the measurement every 05 years during the operation;

b) measure the surface friction coefficient of the runways, taxiways and aprons in the case of construction and renovation; carry out the measurement every once a year for the runways with cement concrete pavement and every 03 years for the runways with asphalt pavement during the operation;

c) measure the weight bearing capacity of runways, taxiways and aprons and surface friction coefficient of runways the CAAV's request.

13. The CAAV shall review and notify ICAO of the differences between the Vietnam's legal regulations on operation of airports and aerodromes and ICAO's standards.

14. Operators of airports and aerodromes shall:

a) Preside over and cooperate with air navigation service providers in preparing procedures for operation of aircrafts on runways, taxiways and in aprons; and updating aerodrome operation literature except those temporarily used during the renovation, upgrade and repair of facilities;

b) Provide main specifications of the runways, taxiways and aprons, aircraft parking configurations and procedures for operation of aircrafts on the runways, taxiways and aprons upon changes in order for the CAAV to publish them on the aeronautical information publication;

c) Set up and maintain signposts, lights, guidance signs, painted markings and prohibition signs for the aerodrome infrastructure in order to maintain operational safety; carry out measures against menacing intrusion into runways, taxiways and aprons; establish holding areas at the intersection of taxiways and runways, holding positions on standby and on internal roads; evaluate risks to maintain the safety of the vicinity of runways in an event of runway excursion or overshoot;

d) Set up at least 01 isolated aircraft stand for emergencies, contagion prevention, aviation security and national security. The isolated aircraft stand shall be distant from other stands, buildings or public facilities and be convenient for security, safeguarding, firefighting and professional tasks. The isolated aircraft stand shall not be located above underground facilities such as aircraft fuel tanks, aircraft fueling pipelines, electrical cables or communications cables;

dd) Regularly examine the conditions of runways, taxiways and aprons to remove foreign object debris (FOD); determine and disclose the conditions of the runways to air navigation service providers for safe management of air navigation and ground activities as per regulations;

e) Implement measures to prevent aircrafts from rolling into closed runways, taxiways and aprons;

g) Identify hazards and assess risks, determine impacts on operational safety upon changes to technical specifications and plans for operation of aerodrome infrastructure;

h) Prepare plans, implement the plans and report on performance of remedial actions according to the results of periodic inspection and assessment of compliance with conditions for operation of airports and aerodromes.

Article 5. Aviation security infrastructure

Aviation security infrastructure shall comply with regulations of law on aviation security, aviation security program and aviation security quality control and important works related to national security.

Article 6. Electric power supply system

1. The regular and backup power supply for aviation buildings and equipment in an airport or aerodrome shall be maintained according to facility and aircraft operation literatures.

2. The time for switching between the regular power system and a backup one has to meet the regulated standards for each item or equipment in the airport or aerodrome.

3. Facility operators shall be allowed to set up their own power supply systems; construct, operate and maintain their power supply systems within their scope of management and operation; ensure synchronous connection to the general power supply system of the airport or aerodrome.

Article 7. Apron lighting system

1. The apron lighting system shall generate sufficient light for pilots to maneuver aircrafts into and out of aircraft stands, for loading and unloading of passengers, baggage and cargo, for fueling and other aircraft services.
2. Apron lights shall not be directed at the aerodrome control tower, ground control tower, and direction of aircrafts' landing. If stationary lighting is not available or there is insufficient light in certain positions or areas of the apron, mobile lighting equipment for aircrafts during night and low visibility operations has to be made available.

Article 8. Water supply and drainage systems at airports and aerodromes

1. The AOA drainage system shall be thoroughly connected with the general drainage system of the airport or aerodrome and the vicinity.
2. Wastewater shall be collected and treated in accordance with technical environmental regulations before discharged to the receiving water bodies as per regulations of law on environmental protection.
3. Facility operators shall set up and maintain a water supply and drainage system within the scope of their management and operation; carry out inspections and ensure quality of water supplied to facilities under their management in accordance with prescribed standards applicable to domestic water.
4. Airport or aerodrome operators shall set up a protection system and formulate an anti-intrusion procedure for the drainage system.

Article 9. Technical infrastructure serving environmental protection at airports and aerodromes

1. Technical infrastructure serving environmental protection at airports and aerodromes shall comply with regulations of law on environmental protection in civil aviation activities.
2. Facility operators shall build technical infrastructure serving environmental protection within the scope of their management and operation, according to environmental standards before connected to the general technical infrastructure serving environmental protection and in a manner that synchronizes with the airport or aerodrome's technical infrastructure serving environmental protection.

Article 10. Passenger terminals, guesthouses serving diplomatic purposes, aviation logistics areas, cargo terminals, cargo warehouses combined with cargo assembly areas

1. Passenger terminals, guesthouses serving diplomatic purposes, aviation logistics areas, cargo terminals and cargo warehouses combined with cargo assembly areas shall consist of the areas

for handling of passenger and cargo processing procedures; working space of relevant regulatory bodies.

2. Passenger terminals shall consist of international airport's area for passengers ineligible for entry; the area for lost baggage procedure; the area for storage of lost or abandoned baggage; the shared area for airlines' and service providers' settlement of customers' complaints; the general information counters or devices for passengers; the area of medical assistance and first aid to passengers; the quarantine area for medical emergencies; the area and devices for passengers with special needs.

3. Aviation logistics areas, cargo terminals and cargo warehouses combined with cargo assembly areas shall consist of the area for storage of lost or abandoned cargo, the shared area for carriers' and service providers' settlement of customers' complaints.

4. Passenger terminals, guesthouses serving diplomatic purposes, aviation logistics areas, cargo terminals and cargo warehouses combined with cargo assembly areas shall be maintained in a hygienic, clean and dry condition and fitted with safety signs.

5. The signs in passenger terminals, guesthouses serving diplomatic purposes, aviation logistics areas, cargo terminals and cargo warehouses combined with cargo assembly areas shall be installed adequately and visibly at the areas for processing of passenger and cargo formalities, the areas for handling of baggage and cargo and other essential areas as per regulations.

6. Barriers, safety and sanitary measures and caution signs shall be deployed at areas under renovation or repair in the passenger terminals, guesthouses serving diplomatic purposes, aviation logistics areas, cargo terminals and cargo warehouses combined with cargo assembly areas.

7. Operators of passenger terminals, guesthouses serving diplomatic purposes, aviation logistics areas and cargo terminals, cargo warehouses combined with cargo assembly areas must comply with the following requirements:

a) Possess a fire-fighting plan and conduct periodic training, drill and inspection thereof as per the laws;

b) Possess facility maintenance procedures and plans;

c) Possess facility operation literature and supervise the abidance by such literature.

8. Passenger terminal operation service providers shall select auto transport enterprises eligible to operate at the terminal's separate passenger pick-up area on the principles of competitiveness and transparency and publicly exhibit those chosen and their fares in the terminal. Passenger transport shall be maintained so as to uphold civility, safety and order. Passenger auto transport business and control regulations shall be issued and passenger transport enterprises and drivers violating the laws or the control regulations shall be handled accordingly pursuant to the signed agreements; coordination counters and plan for safe and orderly operation of the movement area

without congestion shall be set up. The minimum quantity of vehicles shall suit the passengers' demand within the operational capacity.

Article 11. Aviation fuel facilities

Aircraft fuel facilities at airports and aerodromes shall comply with regulations of law on assurance of aviation fuel engineering.

Article 12. Rescue, fire fighting and aerodrome emergencies

1. Operators of airports and aerodromes shall:

a) Assign firefighting staff sufficiently in line with the aerodrome level, arrange fire equipment and clothing adequately for firefighting and rescue personnel according to the airport or aerodrome firefighting plans; arrange fire engines and rescue vehicles on standby in places defined in the aerodrome emergency plan; arrange intermediate (satellite) firefighting stations to respond in the regulated time;

b) Maintain a system of direct communication between each fire station and the aerodrome control tower, between fire stations in the aerodrome, between rescue vehicles; maintain an alert system for rescue and firefighting staff;

c) Arrange firefighting equipment and vehicles, amount of water, foam and powder shall be commensurate with the airport firefighting level approved; emergency equipment and vehicles in line with the size of the airport, aircraft traffic, topographic conditions of the airport and its vicinity. The operator of an airport or aerodrome in a region with complex topographic and environmental conditions shall dispose firefighting and emergency equipment and vehicles accordingly;

d) Determine the level of aerodrome firefighting pursuant to ICAO's standards and present it in the aerodrome operation literature. The operator of an airport or aerodrome shall report to the CAAV, notify air navigation service providers and follow aeronautical information publishing procedures to issue notices to the aircraft departing from or arriving at the airport or aerodrome upon the change to the aerodrome firefighting level due to problems in firefighting equipment and vehicles. The airport or aerodrome operator, after rectifying the problems, shall send other notifications of the level of aerodrome firefighting as per regulations;

dd) Possess garage bay for fire engines and a warehouse for aerodrome emergency and firefighting tools, equipment and materials according to the standards in effect. The fire engine garage bay shall be located in a restricted area on a convenient road for rapid access to runways, taxiways and aprons in accordance with aerodrome emergency plans;

e) Establish an aerodrome emergency center and emergency alert station(s) adequately staffed and furnished with communications equipment, documentation and emergency plans to keep guard and respond to all emergencies;

g) Establish service roads for aerodrome emergency to enable relevant vehicles' rapid access to the AOA by the time specified in Clause 2 of this Article;

h) Possess a fire-fighting water supply system and fire-fighting roads according to standards and technical regulations on firefighting.

2. Response time means the period of time from the initial alert to the first fire engine's release of foam at no less than 50% of the release speed at the location of the aircraft in distress. The following rules apply to the response time of fire engines:

a) The response time of fire engines shall not exceed 02 minutes to reach a position on a runway in the conditions of good visibility, clean road surface and no rain;

b) The response time of fire engines shall not exceed 03 minutes to reach a section of the AOA in the conditions of good visibility, clean road surface and no rain.

3. The operator of an airport or aerodrome and the organizations operating in the territory of the airport or aerodrome shall formulate regulations on fire and explosion prevention and firefighting plans, which consist of the following contents, pursuant to the legislation on firefighting:

a) Large complicated and typical fires, anticipated development of fire;

b) Plans for mobilization of personnel and vehicles, command, application of firefighting tactics and escape solutions according to each stage and each situation of fire;

c) Plans for cooperation with firefighting agencies, military and police units, and other relevant organizations in the locality upon an event of fire or explosion in the airport or aerodrome.

4. The operator of an airport or aerodrome shall cooperate with enterprises operating in the territory of the airport or aerodrome in fire and explosion prevention in the airport or aerodrome; establish a specialized firefighting team, maintain the regular training in firefighting methods and usage of firefighting equipment; assign employees to examine regularly the assurance of firefighting safety; and cooperate closely with local authorities and relevant authorities and units (hereinafter referred to as "entities") in preventing fire and explosion.

5. Airport or aerodrome operators shall promulgate the procedure for inspecting components of the infrastructure and equipment; and maintain materials and water in stock for aerodrome emergency and airport fire prevention.

6. The content of training in fire and explosion prevention shall accord with the specific dangers of fire in the premises. The specialized firefighting team of an aerodrome shall be trained not only in aerodrome emergency firefighting but also in tactics for firefighting in the terminal, warehouse, tower or facility serving air navigation at the airport or aerodrome.

7. The design, construction, repair, renovation and operation of terminals shall adhere to current regulations on firefighting.

8. The use of gas-fueled and electric devices for food processing in a terminal shall be subject to the authorization of the terminal service provider and to the regulations on firefighting safety.

9. Smoking is not allowed in airports and aerodromes and is only permissible in reserved areas.

10. Aircraft maintenance and repair hangars shall be equipped with an automatic firefighting system and explosion prevention system for aircrafts.

11. Every entity operating at an airport or aerodrome shall send its fire firefighting plan to the airport or aerodrome operator for cooperation in handling in the event of any situation that arises and update it upon changes.

Article 13. Explanatory notes to the general floor plans of airport and aerodrome facility construction projects

1. Explanatory notes to a general floor plan include the following contents: legal bases, standards and technical regulations applied (if any) for making the general floor plan; description of the location and boundary of the area for which the general floor plan is made; summary of scale, nature and functions of the facility; elevation and height of facility; demand for land and technical infrastructure; direction, route, scale, level and elevation limits; direction, route and scale of the water supply and drainage system; electric power supply and information systems (if any).

2. Related drawings consist of map of the location and boundary of the land area located on the approved airport or aerodrome planning map; the facility's general floor plan shown on the topographic survey drawing and showing the boundary of the land area and the facility on land, roads, location where the facility is connected to the technical infrastructure system, red boundary line and building setback with safety perimeters of the technical infrastructure routes (if any).

Article 14. Plague prevention and control at airports and aerodromes

1. Vehicles, organizations, agencies and individuals working in airports and aerodromes shall abide by the Law on Prevention and Control of Infectious Diseases and adhere to the competent regulatory bodies' instructions on prevention and control of plagues in airports and aerodromes and plagues transmitted by air.

2. Passenger terminals shall be subject to the following conditions:

a) Normal hygienic prevention of diseases; intensification of hygiene and sterilization with permissible disinfectant chemicals during a plague;

b) Arrangement of sufficient disinfectant solutions or hand soaps in toilets and certain convenient areas in the terminal;

c) Arrangement of sufficient equipment, protective gears, medicines and chemicals for anti-plague measures in accordance with regulations of law on prevention and control of infectious diseases.

3. In an event of plague outbreak, the airport or aerodrome operator shall cooperate with the passenger terminal operator in implementing anti-plague measures; disseminate anti-plague measures to passengers as requested by regulatory competent bodies; arrange examination areas for passengers' health declaration and areas for health monitoring, temperature checkup or other measures of health examination and control pursuant to the laws.

4. In an event of contagious plague, international and domestic aircrafts shall, according to the plague alert level, be sterilized with permissible disinfectant chemicals pursuant to the regulations of law on prevention and control of infectious diseases and the airline shall assume responsibility for health control. The process of sterilization proceeds in the following manner:

a) Any passenger or cargo showing signs of a contagious disease in group A shall be examined and kept under health control prior to entry, departure or transit;

b) If an aircraft shows signs of a contagious disease in group A, it must be parked at an isolated stand and sterilized pursuant to regulations.

5. Air transport companies shall propagate information and supervise passengers making health declarations fully and accurately prior to their boarding a flight; cooperate with competent agencies in plague prevention and control and handling of passengers suspected of contracting or having been infected with a contagious disease; immediately notify the airport authority, airport/aerodrome operator and health quarantine agency of the aircrafts departing from or arriving in the regions where a contagious plague spreads.

6. The CAAV shall direct units in the aviation industry to cooperate with health quarantine agencies in implementing measures for preventing and controlling plagues in airports and aerodromes and for preventing and controlling plagues transmitted by air according to the regulations of law on prevention and control of infectious diseases, World Health Organization and ICAO.

7. Entities working in airports and aerodromes shall abide by the Law on Prevention and Control of Infectious Diseases and adhere to the competent regulatory bodies' instructions on prevention and control of plagues in airports to promulgate plague prevention and control plans and procedures.

Article 15. Management of aviation obstacles

1. The management of aviation obstacles in an airport or aerodrome and its vicinity shall be subject to the Government's Decree No. 32/2016/ND-CP dated May 05, 2016 and ICAO's standards.

2. The CAAV shall:

a) Direct the regulation of aviation obstacle limitation surfaces, the height of buildings in connection with aviation obstacle limitation surfaces in aerodromes and in restricted functional areas of towers and aviation radio stations; and the limitation of obstacles in the vicinity of airports and aerodromes; and presenting such regulations to the General Staff for the agreement to establish the aviation obstacle limitation surfaces;

b) Cooperate with relevant entities under the General Staff, ministries, bodies and provincial People's Committees in managing aviation obstacle limitation surfaces, precluding and handling the buildings in violation of aviation obstacle limitation surfaces and of civil flight activities; propagating information to organizations and communities in the territory and vicinity of aerodromes to have them participate in the maintenance and management of obstacle limitation surfaces for the safety of flight activities;

c) Publish the aviation obstacle limitation surfaces and maps of obstacles in civil flight areas and the list of natural and artificial obstacles that may affect air navigation safety.

3. Providers of air navigation services shall measure and map obstacles in civil flight areas; reckon and mark natural and artificial obstacles that may affect air navigation safety; update information on obstacles; and submit reports thereon to the CAAV.

4. Airport authorities shall inspect and supervise the compliance with regulations on management of aviation obstacles in airports, aerodromes and their vicinity.

Article 16. Base aerodromes of domestic airlines

1. An aerodrome is considered as a base aerodrome of a domestic airline if it:

a) has a maintenance facility approved by the CAAV or signs a maintenance contract with the maintenance facility approved by the CAAV;

b) offers overnight aircraft stands to the airline.

2. Domestic airlines shall work with the airport or aerodrome operators to determining the actual operational capacity of the apron in a manner that is appropriate to the airlines' demand for base aerodromes and overnight aircraft stands.

3. The CAAV shall determine base aerodromes of domestic airlines in the course of considering issuing or revising the air operator's certificate and announce the base aerodromes.

Article 17. Airport and aerodrome operations key personnel

1. Competency requirements applicable to key airport and aerodrome operations key personnel specified in Clause 1 Article 6 of the Government's Decree No. 05/2021/ND-CP dated January 25, 2021 on management and operation of airports and aerodromes (hereinafter referred to as "the Decree No. 05/2021/ND-CP") are as follows:

- a) Have obtained at least a bachelor's degree;
 - b) Have worked continuously for at least 05 years in an international airport or 03 years in a domestic airport or aerodrome in the management of air traffic, airport or aerodrome operation or aviation safety;
 - c) Have been trained in aerodrome design and operation and in aircraft ground service provision.
2. Within 24 months from the effective date of this Circular, the airport and aerodrome operations key personnel specified in Point b Clause 1 Article 6 of the Decree No. 05/2021/ND-CP must satisfy the requirements laid down in Clause 1 of this Article.
 3. Within 36 months from the effective date of this Circular, the airport and aerodrome operations key personnel specified in Point b Clause 1 Article 6 of the Decree No. 05/2021/ND-CP must satisfy the competency requirements according to the ICAO's Guidance on Airport and Aerodrome Operations Personnel Competency Requirement Framework.
 4. Information about airport and aerodrome operations key personnel shall be updated to the aerodrome operation literature.
 5. Depending on the organizational structure of the airport or aerodrome operator, a key person may hold multiple positions or positions that may not match the names of the positions described in the ICAO's Guidance on Airport and Aerodrome Operations Personnel Competency Requirement Framework.

Article 18. Conditions for operation to be satisfied by aviation service providers at airports and aerodromes

An aviation service provider at an airport or aerodrome shall enter into a contract with an airport enterprise so as to ensure security, safety, service quality, environmental quality and conformity with the specific circumstance of operation of the airport or aerodrome according to the airport or aerodrome operation literature. The contract shall fully state the rights and responsibilities of each party, price of franchise for the right to operate services and effective period of the contract.

Article 19. Contents of ground-based commercial services of aviation service providers at airports and aerodromes

Ground-based commercial services include all or one of the following services:

1. Management and supervision of activities serving flights
 - a) Acting on behalf of airlines to work with local authorities or other organizations; acting on behalf of airlines to make payment and provide locations to the airlines' representatives;
 - b) Control of payloads, messages and communications;

c) Use, storage and management of unit load devices (ULD);

d) Control of other services before, during or after flights and performance of other tasks at the request of airlines.

2. Passenger processing includes procedures for assisting arriving, departing, transit and transfer passengers, processing of passengers and baggage, and transport of baggage to the sorting area.

3. Baggage processing

a) Moving baggage to the sorting area, sorting baggage and handling baggage for departure flights;

b) Loading or unloading of baggage onto or from specialized equipment;

c) Transporting baggage from the sorting area to the baggage claim area.

4. Cargo and mail processing

a) Cargo processing includes cargo warehousing, handling outbound, transit and inbound cargo; handling documents related to cargo and customs procedures, and implementing procedures for ensuring aviation security as agreed upon by the parties or as required by law;

b) Mail processing includes outbound and inbound mails; handling mail-related documents and implementing procedures for ensuring aviation security as agreed upon by the parties or as required by law.

5. Aircraft servicing

a) Assisting aircrafts at stands and providing necessary equipment and vehicles;

b) Establishing information connection between aircrafts and service providers in the AOA;

c) Loading and unloading aircrafts, including providing, controlling and operating equipment and vehicles suitable for transporting passengers, crews and passengers with reduced mobility between the aircraft and the terminal, crew check-in place; providing, controlling and operating equipment and means suitable for transporting baggage, cargo and mails between the aircraft and the terminal;

d) Providing, controlling and operating equipment and vehicles suitable for starting engines or moving aircraft on the apron;

dd) Transporting and loading and unloading of food and drinks onto and from aircrafts;

e) Cleaning the inside and outside of aircrafts;

- g) Supplying potable water, and water to lavatories;
- h) Supplying cool and warm air to aircrafts.

6. Ground transport

- a) Organizing and transporting crews, passengers, baggage, cargo and mails between terminals within the same airport (excluding transport thereof between aircrafts and any other point within the same airport);
- b) Organizing and transporting staff working within the AOA between points in an aerodrome;
- c) Special service requests made by airlines.

SECTION 3. AIRPORT AND AERODROME SAFETY INSPECTORS AND AIRPORT SERVICE QUALITY INSPECTORS AT AIRPORTS AND AERODROMES

Article 20. General requirements

1. Airport and aerodrome safety inspectors and airport service quality inspectors at airports and aerodromes affiliated to the CAAV or airport authorities are appointed and issued with inspector's cards by the CAAV to carry out inspections as prescribed in this Circular.

2. The person who is appointed as an airport/aerodrome safety inspector or issued with the inspector's card is subject to the following requirements:

- a) Have obtained at least a bachelor's degree;
- b) Have at least 05 years' work experience in airport or aerodrome management and operation if he/she has obtained at least a bachelor's degree in the technical-related major or field of study; 07 years' work experience in airport or aerodrome management and operation if he/she has obtained at least a bachelor's degree in another major or field of study;
- c) Be proficient in English at level 2 according to Vietnam's language proficiency framework or equivalent or higher in accordance with regulations of law on education and training;
- d) Possess a certificate of completion of training courses for airport/aerodrome safety inspectors which is issued by the CAAV or a training institution recognized by ICAO, ACI or IATA.

3. The person who is appointed as an airport service quality inspector or issued with the inspector's card is subject to the following requirements:

- a) Have obtained at least a bachelor's degree;
- b) Have at least 05 years' work experience in airport or aerodrome management and operation or air transport;

c) Be proficient in English at level 2 according to Vietnam's language proficiency framework or equivalent or higher in accordance with regulations of law on education and training;

d) Possess a certificate related to airport or aerodrome management or operation or air transport which is issued by the CAAV or a training institution recognized by ICAO, ACI or IATA or decision on completion of training courses for airport service quality inspectors at airports/aerodromes which is issued by the CAAV.

4. The CAAV shall:

a) determine the number of airport and aerodrome safety inspectors to satisfy the demand for airport and aerodrome safety inspection in the nationwide airports and aerodromes.

b) formulate a plan to provide training to airport and aerodrome safety inspectors and airport service quality inspectors at airports and aerodromes to satisfy the requirements set forth in Clauses 2 and 3 of this Article;

c) provide guidance on inspection by airport and aerodrome safety inspectors and airport service quality inspectors at airports and aerodromes;

d) Appoint the holder of the certificate of completion of equivalent courses to participate in the teaching process or invite domestic and foreign experts and domestic and foreign training institutions to participate in teaching and training airport and aerodrome safety inspectors and airport service quality inspectors at airports and aerodromes.

5. The CAAV shall prepare and archive dossiers on appointment of airport and aerodrome safety inspectors and airport service quality inspectors at airports and aerodromes. The CAAV and airport authorities shall archive inspection documents of airport and aerodrome safety inspectors and airport service quality inspectors at airports and aerodromes in accordance with regulations of law on archives.

6. The CAAV shall announce the invalidation of airport and aerodrome safety inspector's cards and airport service quality inspector's cards in the following cases:

a) The person who is appointed as an inspector is reassigned and has no longer worked for the CAAV or the airport authority;

b) The person who is appointed as an inspector is reassigned within the CAAV or the airport authority but has no longer worked in the field of airport/aerodrome safety inspection or airport service quality inspection.

7. The template for an airport/aerodrome safety inspector's card is provided in the Template No. 01 in the Appendix I hereof.

8. The template for an airport service quality inspector's card is provided in the Template No. 02 in the Appendix I hereof.

Article 21. Rights and responsibilities of airport and aerodrome safety inspectors and airport service quality service inspectors at airports and aerodromes

1. An airport/aerodrome safety inspector has the following powers and responsibilities:

a) Inspect and verify the compliance with the regulations on the safety of operation of the airport/aerodrome;;

b) Enter the areas where airport or aerodrome operations occur upon performing the duties;

c) Request relevant organizations and individuals to provide documents and objects concerning an incident that jeopardizes aviation safety or for investigating a violation; maintain confidentiality of information as prescribed and do not abuse his/her powers to use information for personal purposes;

d) Examine and copy licenses, certificates, technical logbooks, documents or files concerning the management and operation of the airport/aerodrome;

dd) Request organizations and individuals to stop activities likely to threaten aviation safety or cause fire or explosion at the airport/aerodrome temporarily aviation employees and to facilitate incident investigation; make written records of occurrences and incidents;

e) Take responsibility for his/her decisions as prescribed by law.

2. An airport service quality inspector has the following rights and responsibilities:

a) Inspect and verify the implementation of regulations on the quality of aviation services at the airport/aerodrome;

b) Enter the areas where airport or aerodrome operations occur upon performing the duties;

c) Request relevant organizations and individuals to provide documents or objects concerning the provision of aviation or air transport services and quality of services at the airport/aerodrome or for ascertaining a violation against regulations of law;

d) Examine and copy licenses, certificates, technical logbooks, documents or files concerning the provision of aviation services and air transport services and quality of services at the airport/aerodrome;

dd) Request organizations and individuals to stop the activities in serious breach of commitments and standards in provision of aviation services and quality of aviation services at the airport/aerodrome; make written records of occurrences and incidents;

e) Take responsibility for his/her decisions as prescribed by law.

3. Upon exposing a violation of legal regulation(s) on airport and aerodrome management and operation, the airport/aerodrome safety inspector and the airport service quality inspector shall report to the competent authority for imposition of administrative penalties as prescribed; to the CAAV for emergency suspension of the operation or service of the organization or individual constructing or operating the related facility or providing the related service at the airport/aerodrome.

Chapter II

AERODROME OPERATIONAL SAFETY

SECTION 1. AIRCRAFT SAFETY

Article 22. Aircraft wheel chock placement

1. As soon as the aircraft comes to a complete stop at the stand, wheel chocks shall be placed around the aircraft's nose landing gear according to the aircraft operator's ground operations manual. If the aircraft operator's ground operations manual has yet to clearly define the aircraft wheel chock placement plan, aircraft wheel chocks shall be placed according to the IATA's IGOM.

2. The chocks should be placed on the main landing gear of the aircraft only when its anti-collision lights and main engine have been switched off; the removal of aircraft wheel chocks in preparation for departure should be performed only after all vehicles and equipment servicing the aircraft are clear of the aircraft and the personnel assigned to communicate with the aircraft has agreed with the flight crew.

Article 23. Placement of safety cones around aircraft

1. The aircraft operator shall cooperate with the ground-based commercial service provider to place safety cones around the aircraft according to the aircraft operator's ground operations manual. If the aircraft operator's ground operations manual has yet to clearly define the safety cone placement plan, the safety cones shall be placed according to the IATA's IGOM.

2. Safety cones are conical, have a minimum height of 750 mm and a minimum weight of 4.5 kg and are yellow or orange with reflective stripes. Safety cones (when in use) should be placed after placing wheel chocks and removed prior to removal of the wheel chocks.

3. It is mandatory to place safety cones at the tail of the aircraft at the stands where the service road is adjacent to the aircraft safety area on the stand at the tail.

4. If it is necessary to mark nose landing gear stop line, the safety cone shall be placed on the nose landing gear stop line to both sides, from 02 m to 03 m from the aircraft stand taxilane center line before taxiing of the aircraft to the stand.

Article 24. Starting and testing aircraft engines

1. Aircraft engines shall be only started or tested at designated positions. Every airport or aerodrome operator shall define the positions where the aircraft engine start-up or testing is permitted (except aprons attached to aircraft maintenance facilities of specific facility operators). The aircraft operators shall move aircrafts to the positions where the aircraft testing is permitted according to regulations laid down by the aircraft or airport operator.

2. The aircraft or airport operator shall establish procedures for ensuring cooperation between units in cases where the aircraft engines are permitted to be started at idle power. Engine start-up at the aircraft stand must be subject to approval by an air traffic controller and notified to the airport or aerodrome operator or representative of the airline. Aircraft maintenance and repair staff shall cooperate with on-duty staff of the airport or aerodrome operator in warning people and vehicles not to move to the areas where the aircraft is started.

3. An aircraft is started at idle power at the aircraft stand only when:

a) The area where ground services are provided and area in front of the aircraft nose are clear of obstacles (except for vehicles and equipment for starting the aircraft engine, maintenance and repair staff and firefighters that are permitted to operate within the aircraft stand but required to be clear of the engine danger area);

b) The tractor is connected to the aircraft for the stands where the tractor is required for pushing and towing operations after starting the aircraft engine.

Article 25. Safe distance from taxiing aircrafts

1. People, vehicles and equipment must not move across the taxiway on which an aircraft is taxiing and keep a safe distance of at least 125 m behind and 200 m in front of a taxiing aircraft.

2. When the aircraft taxis or is pushed in or back from its stand, all ground staff, vehicles and equipment must move outside the stand limit line, except marshallers, staff, vehicles and equipment engaged in pushing and towing of the aircraft into or out of the aircraft stand.

Article 26. Safe distance from parked aircrafts

1. For code C jet aircrafts (A320, A321 or equivalent), people, vehicles and equipment must keep a safe distance of at least 06 m in front of and 60 m behind the engine of the aircraft operating at idle power.

2. For code D, E and F jet aircrafts (B767, A330, A350, B787 and B747-8, B777-9, A380 or equivalent), people, vehicles and equipment must keep a safe distance of at least 08 m in front of and 80 m behind the engine of the aircraft operating at idle power.

3. For regional propeller-driven and jet aircrafts (equivalent to code A and B aircrafts), people, vehicles and equipment must keep a safe distance of at least 04 m in front of and 40 m behind the engine of the aircraft operating at idle power.

Article 27. Sequence of vehicles approaching an arriving aircraft

1. Sequence of vehicles servicing same side of an arriving aircraft shall comply with the airline's aircraft operations document.
2. If the airline's aircraft operations document does not specify the sequence, the sequence of vehicles servicing same side of an arriving aircraft is as follows:
 - a) Passenger service vehicles and equipment such as self-propelled telescopic passenger stairs, passenger boarding bridges, buses;
 - b) Cargo and baggage service vehicles and boarding/de-boarding vehicles for passengers with reduced mobility;
 - c) Catering vehicles, fueling vehicles and airport staff buses;
 - d) Vehicles and equipment for aircraft technical services such as aircraft ground power units, air start units, aircraft air conditioning units, lavatory aircraft service vehicles, potable water vehicles, auxiliary equipment attached to passenger boarding bridges.

Article 28. Operations within aircraft safety area on stands and passenger boarding bridges

1. People, vehicles and equipment must not move, stop or be parked within the aircraft safety area whilst the aircraft is taxiing into the stand, its main engine is in operation and anti-collision lights are still illuminated.
2. People, vehicles and equipment must not move, stop or be parked under any passenger boarding bridge. If necessary to enter the operating area of the passenger boarding bridge (the area with red diagonal pattern), the principle of approach must be adhered to after the passenger boarding bridge has entered its operating position or has returned to its holding position as prescribed, and at the same time, the vehicle driver must proactively maintain communication with the passenger boarding bridge operator during the servicing process.
3. Vehicles must not stop or be parked on fuel hydrant pits and fire hydrant pits.

SECTION 2. SAFETY OF PEOPLE, VEHICLES AND EQUIPMENT OPERATING WITHIN AOAS

Article 29. People carrying out operations within AOAs

1. Comply with regulations on assurance of security and safety at AOAs and wear the effective aviation security control badge issued by a competent authority.
2. Wear a reflective or reflective stripe jacket.

3. Use walkie-talkies or appropriate two-way communication equipment, maintain constant communication with and abide strictly by the instructions given by the aerodrome control tower at the frequency prescribed by each airport and aerodrome. If walkie-talkies or appropriate two-way communication equipment is not available, there must be a person in charge or supervisor carrying walkie-talkies or appropriate equipment to maintain communication.

4. When operating a vehicle or equipment, comply with the regulatory speed limits; do not accelerate or brake suddenly upon the vehicle's approach to or detachment from an aircraft; observe and control the speed when driving the vehicle on service roads or steer the vehicle's approach to an aircraft or reverse the vehicle.

5. Adhere to a course and manner of direction to avoid collision with other vehicles; abide by the regulations on route, corridor, traffic flow of vehicles operating in restricted area of the airport or aerodrome.

6. Comply with standard operating procedures of vehicle manufacturers and operators; regulated principles of occupational safety and fire prevention; put on work uniform pursuant to the employer's regulations.

7. When driving a vehicle on the service road, at the intersections between a service road and a taxiway, the vehicle driver must observe and stop the vehicle in order for the aircraft to taxi. When driving a vehicle on the service road, at the intersections between a service road and an aircraft stand taxilane center line, the vehicle driver must decelerate the vehicle, observe the aircraft's taxiing, stop the vehicle at the prescribed position to maintain a safe distance from the aircraft taxiing and is only permitted to drive when the aircraft has taxied beyond the intersection to maintain a safe distance from the aircraft.

8. Every vehicle driver must observe, decelerate or stop the vehicle to prevent unsafe happenings in the following cases:

a) At the request of a competent person pursuant to airport/aerodrome's regulations;

b) Upon an aircraft's taxiing; the vehicle's passing the apron, luggage loading and unloading area, passenger's pathway or area under construction;

c) The limitation of vision;

d) The vehicle's dodging or giving way to another running in opposite direction or coming from behind, respectively;

dd) Upon entering a hot spot on the service road;

e) Upon approaching a corner on the service road.

9. The vehicle driver must not stop or park the vehicle on the service road (except for the vehicles servicing staff working in an AOA, passengers, baggage and cargo on the service road

adjacent to the passenger terminal or cargo terminal, on-duty vehicles serving emergency rescue and fire fighting and the cases specified in Clauses 7 and 8 of this Article) or park the vehicle against regulations, thereby obstructing the movement of other vehicles.

10. The vehicle driver must not drive the vehicle through the gap between:

- a) A marshalling vehicle and an aircraft taxiing;
- b) An aircraft and a marshaller;
- c) The VDGS system in operation and an aircraft taxiing into the aircraft stand;
- d) The flow of passengers walking from an aircraft to a passenger bus or passenger terminal and vice versa.

11. The vehicle driver must not drive under the fuselage, wings and engines of an aircraft, except functional vehicles that have to move partially under an aircraft during their service.

12. The person operating a vehicle or equipment on a service road under the passenger loading bridge must follow height restriction signs. The passenger terminal operator must publish the actual height restrictions for passenger boarding bridges and put up height restriction signs at positions subject to the height restrictions for the vehicles and equipment moving under passenger boarding bridges.

13. The person operating a vehicle or equipment from a service road to the areas subject to vehicle or equipment height restrictions and vice versa must follow the vehicle or equipment height restrictions published by the facility operator. The facility operator must put up height restriction signs at positions subject to height restrictions for the vehicles and equipment in areas subject to vehicle and equipment height restrictions.

14. The vehicle driver must not leave his/her cabin during the operation of the vehicle's engine, except for:

- a) Refuellers with brake interlock system;
- b) Vehicles and equipment with their stabilizers deployed in safe mode;
- c) Vehicles and equipment with service positions different from the operating positions or ramp equipment tractors attached to dollies, towed conveyor belt loaders, self-propelled and non-self-propelled conveyor belt loaders with fully activated handbrake system and vehicles and equipment fitted with wheel chocks.

15. Upon approaching an aircraft, the vehicle driver must follow the following principles:

- a) Approach the aircraft only when it has come to a complete stop, has been fitted with wheel chocks, its main engine and anti-collision lights have been switched off, except where the

shutdown of its engines requires supporting equipment and a confirmation signal is given by the staff communicating with the crew;

b) Approach the aircraft following the sequence prescribed in the aircraft operations document;

c) Park the vehicle at the position defined in the service layout for each type of aircraft without disturbing the activities of other vehicles operating in the AOA;

d) Have a person guide vehicles reversing towards an aircraft, except those fitted with an automatic aircraft approach system.

16. The vehicle operator must be familiar with the site plan of the operation locations, routes, light signals, signs, signboards, painted markings and regulations on operation of vehicles and equipment on the apron.

17. Persons working on an apron are not permitted to travel on the service road for vehicles, are only permitted to cross the service road at the positions for pedestrians, except for the person in charge of road inspection and cleaning; shall observe and keep a safe distance upon moving through the areas where ground services and operations are carried out and upon an aircraft's taxiing. The airport or aerodrome operator shall determine the locations where the persons working on an apron are permitted to cross the service road in the AOA.

18. Persons working on the apron must not take rests or shelter from the sun and rain underneath, next to or around ground vehicles and equipment awaiting aircraft servicing.

19. When a vehicle is moving on the service road in an operations area, the vehicle driver and occupants must wear seat belts with which their seats are equipped.

20. Do not carry flammable substances, explosives, toxic substances, corrosive substances or any other substances capable of affecting facilities and equipment without the permission of a competent authority.

21. Do not smoke, light fires or create open fires in restricted areas of airports and aerodromes.

22. Do not throw garbage and waste in AOAs.

23. Do not use mobile phones while operating or controlling ground vehicles and equipment, except emergency cases where communication is required or the walkie-talkies are damaged.

24. While not on duty, people and vehicles must not approach aircrafts, equipment in the AOAs and move in the movement area of an aerodrome.

Article 30. Use of vehicles and equipment operating within AOAs

1. The use of vehicles and equipment within an AOA must be subject to an effective aviation security control license issued by a competent authority.

2. Vehicles and equipment regularly operating within an AOA must be marked to identify the managing unit with its full name or abbreviated name (in English or Vietnamese).

3. The use of bicycles and mopeds within an AOA is prohibited, except for the following cases:

a) Aviation security forces ride bicycles within the air operation areas to carry out patrol or stand guard; use bicycles or mopeds to carry out patrol on service roads within the AOA pursuant to regulations on aviation security and the aerodrome operation literature contains specific regulations on traveling routes and plan to ensure operational safety under extreme weather conditions or low visibility conditions;

b) Personnel drives mopeds on service roads to ensure operation of systems for provision of information, follow-me and inspection services within the AOA, survey and repair facility items and equipment within the AOA; expel wildlife or prevent illegal entry into the AOA and the aerodrome operation literature contains specific regulations on traveling routes and plan to ensure operational safety under extreme weather conditions or low visibility conditions;

c) Marshallers at the aerodrome ride bicycles within the air operation areas to carry out their marshalling duties at the aerodrome and the aerodrome operation literature contains specific regulations on traveling routes, bicycle parking locations or areas for provision of marshalling services and plan to ensure operational safety under extreme weather conditions or low visibility conditions;

d) Personnel in charge of cleaning and controlling an apron rides bicycles on service roads to the aircraft stands in order to collect FOD and cooperate in responding to oil spill and the aerodrome operation literature contains specific regulations on traveling routes, bicycle parking locations or areas and plan to ensure operational safety under extreme weather conditions or low visibility conditions.

4. Providers of aviation and ground technical services shall develop:

a) Aircraft approaching and servicing procedures applicable to vehicles and equipment for assurance of operational safety in the AOA in accordance with the aircraft operations document;

b) Plan to relocate immobile vehicles; reach an agreement thereon with the aircraft or aerodrome operator to make it conformable with the aerodrome operation literature and regulations on safety operation in restricted areas of the airport or aerodrome;

c) Plans for response to other abnormal circumstances within their jurisdiction.

5. Vehicles and equipment must be fitted with appropriate firefighting equipment. Firefighting equipment must undergo periodic inspections and be within its service life as prescribed.

6. Low beam headlights, rotating lights or flashing lights (warning lights) must be switched on and high beam headlights must not be used when operating vehicles and equipment at night, in fog, rain or in low visibility conditions, except for the tractor towing or pushing an aircraft.

7. Equipment and vehicles not fitted with stabilizers (excluding dollies, towed conveyor belt loaders, refuellers with brake interlock system, towbars, aircraft tail stands) must be fitted with wheel chocks; wheel chocks must be checked regularly and placed in a convenient position.
8. When parked in the apron or stopping or parked to service an aircraft, vehicles or equipment must be fitted with handbrakes or wheel chocks or the hydraulic stabilizers must be deployed (for equipment fitted with hydraulic stabilizers); except for refuellers with brake interlock system.
9. If the operator of a vehicle in a restricted area of an airport or aerodrome does not have the license to control or operate vehicles or equipment operating in restricted areas of airports and aerodromes, a follow-me vehicle of the airport or aerodrome operator must be provided, except where the construction vehicles for which the moving routes have been defined according to the plan approved by the competent authority.
10. Vehicles must not carry cargoes or passengers beyond their capacity.
11. When not in operation or done servicing a flight, vehicles and equipment must be parked within of the vehicle and equipment assembly area according to regulations.
12. A specialized aviation vehicle shall be suspended in the following cases:
 - a) It fails to undergo technical and environmental safety inspection or fails to satisfy operational requirements pursuant to the vehicle's technical documentation;
 - b) It causes an incident or accident.
13. The specialized aviation vehicle specified in Article 12 of this Article shall resume to operation in the following cases:
 - a) The violations defined in Point a Clause 12 of this Article have been rectified;
 - b) The cause of the incident or accident concerning the vehicle has been identified.

Article 31. Vehicle speed

1. Maximum permissible speed:
 - a) 05 km/h within aircraft safety areas on stands;
 - b) 35 km/h on service roads on aprons;
 - c) 50 km/h on service roads outside aprons, roads for aerodrome patrols.

2. The maximum permissible speed specified in Clause 1 of this Article shall not apply in the event of aerodrome emergencies. In this case, vehicles shall carry out emergency tasks according to the approved and announced emergency plan.

3. Under special conditions of each airport or aerodrome and to ensure operational safety in the AOA, the airport or aerodrome operator may specify the speed of vehicles operating in restricted areas of the airport or aerodrome in the aerodrome operation literature in a manner that is suitable for the vehicles' functionalities but not exceeding the maximum permissible speed specified in Clause 1 of this Article, clearly state specific reasons therefore and notify the entities.

4. The airport or aerodrome operator shall carry out speed limit marking or put up speed limit signs on service roads in the AOA.

Article 32. Priority of operations within AOAs

1. People, vehicles and equipment must stop or park at or move to the safety area as prescribed whilst aircrafts are landing, taking off and taxiing.

2. People, vehicles and equipment operating in an AOA must give priority to and give way to vehicles and equipment participating in responding to aerodrome emergencies and serving VIP flights.

3. People, vehicles and equipment operating in an AOA must give priority to and give way to vehicles and tractors towing and pushing aircrafts.

Article 33. Activities of people and vehicles moving on runways and taxiways

1. Upon conducting activities on a runway or taxiway, people and vehicles must obtain consent and strictly follow the instructions of the air traffic controller; ensure smooth and continuous communication during operation.

2. When requested to move off the runway or taxiway by the aerodrome control tower, people and vehicles must quickly move to maintain a prescribed safe distance from to the runway or taxiway centerline.

3. People and vehicles moving on a taxiway must stop at the taxiway holding position before reaching the runway or at the taxiway intersections unless authorized by the aerodrome control tower.

4. In the event of loss of communication, the vehicle operator must:

a) Attempt to re-establish communication with the air traffic controller;

b) Proactively observe activities on the runway or taxiway and move off the runway or taxiway to maintain a safe distance from the runway or taxiway centerline and hold at a holding position

until communicating with or receiving instructions from the aerodrome control tower via signal lights as prescribed;

c) Use necessary communication equipment to communicate directly with the airport or aerodrome operator and the aerodrome control tower to notify his/her moving off the runway or taxiway and to serve cooperation purposes.

Article 34. Assurance of technical and environmental safety for vehicles

1. Vehicles operating within restricted areas of airports and aerodromes on the list specified in the Appendix II enclosed herewith must undergo technical and environmental safety inspection according to regulations of the Minister of Transport and technical and environmental safety inspection for automobiles, heavy-duty vehicles, four-wheeled passenger vehicles; technical safety inspection for loading and unloading equipment, boilers and pressure equipment used in transportation.

2. If a vehicle operating within an restricted area of an airport or aerodrome is being operated or used stably but fails to have one of the documents specified by regulations on technical, occupational and environmental safety inspection, its owner or operator/user shall determine and take responsibility for origin of such vehicle and replace the document proving the origin in accordance with regulations on technical, occupational and environmental safety inspection.

Article 35. Maintenance of vehicles and equipment

Vehicle and equipment operators shall maintain vehicles and equipment in accordance with the technical manuals to ensure safety during operation.

Article 36. Technical documentation for vehicles

Operators of the vehicles operating in restricted areas of an airport or aerodrome shall formulate the technical documentation for such vehicles. The technical documentation for a vehicle consists of written technical guidelines, technical operating documents, history record and dossier on model modification.

Article 37. Written technical guidelines for vehicles

1. Written technical guidelines are issued by the builder or operator of the vehicle as guidance on the application of technical standards in the design, building, operation and maintenance of the vehicle. Written technical guidelines consist of:

a) User's manual;

b) Maintenance manual;

c) Technical training documentation.

2. A user's manual gives the essential technical information and specific instructions to the persons maneuvering, operating, maintaining and repairing a vehicle.
3. A maintenance manual for a vehicle displays the information and guidelines necessary for maintenance.
4. Technical training documentation includes written materials used for training, guiding and re-classifying technicians in technical training institutions or aviation employee training courses. Manufacturers, vehicle operators or training institutions can prepare and endorse technical training documentation prior to use.

Article 38. Technical operating documentation for vehicles

1. Technical operating documentation is the essential documentation for the operation and technical management of vehicles. Technical operating documentation endorsed by the entities managing and operating the vehicles includes:

- a) Technical logbooks, technical records;
- b) Technical statistics documents;
- c) Technical reports;
- d) Ad hoc reports.

2. A technical logbook records technical conditions of the vehicles on daily basis or shift basis.

3. A technical record keeps account technical problems of the vehicles on the course of operation.

4. Technical statistics documents compile and analyze the operational status of the vehicles in certain cycles. They contain statistical data on the number of active hours, the amount of functional times, kilometers traveled, technical problems and other data defined by the relevant entity.

5. Technical reports aggregate and impart the technical and operational status of the vehicles, including the quantity of vehicles satisfying and failing technical safety and environmental standards and those licensed and not licensed to operate; those being liquidated; those newly invested.

6. Ad hoc reports take account of the vehicles causing an incident or damage to aircrafts. The content of an incident report includes:

- a) Name and designation of the vehicle(s) causing the incident;
- b) Date, time and location of the technical incident;

- c) Written confirmation of the progress of the technical incident and consequential conditions;
- d) Preliminary determination of possible cause(s) of the incident and damage level;
- dd) Recommendation(s) and solution(s).

Article 39. Vehicle history record and model modification dossier

1. A record of a vehicle's technical history is the written account of its origin, name, designation, main functionalities, operation and maintenance.

2. The technical history record is formulated by the entity managing and operating the vehicle and consists of:

- a) Name and address of the operator;
- b) Name, designation and registration number of the vehicle;
- c) Functionalities;
- d) Country of manufacture;
- dd) Chassis number, engine number, main assemblies' codes;
- e) Date of manufacture, date of use;
- g) Date of maintenance or repair.

3. A model modification dossier is formulated by the entity managing and operating the vehicle and consists of:

- a) Name and designation of the vehicle's model after renovation or modification;
- b) Reason(s) for renovation or modification;
- c) Verification of the adherence of the vehicle model renovation or modification to technical standards as approved by competent authorities;
- d) Date of issue;
- dd) Issuer.

Article 40. Format of number plates of specialized aviation vehicles

1. The alphabetical characters refer the IATA's code of the airport where the vehicle operates.

2. The first numerical character refers to the entity managing and operating the vehicle:
 - a) 1 means the vehicle belonging to the operator of the airport or aerodrome;
 - b) 2 means the vehicle belonging to an airline;
 - c) 3 means the vehicle belonging to an aviation service provider.
3. The next two numerical characters refer to the type of the vehicle announced by the CAAV.
4. In succession to the two numerical characters that manifest the type of the vehicle are the numerical characters that display the order of licensing of the vehicle, which starts at 01.
5. Material of the number plate: the number plate is made of reflective metal and displays white alphabetical and numerical characters on a blue background.
6. Depending on the vehicle's specialized design, the entity managing and operating the specialized vehicle shall propose an appropriate number plate as follows:
 - a) Short number plate: 165 mm in height, 330 mm in length;
 - b) Long number plate: 110 mm in height, 520 mm in length;
 - c) Medium number plate: 140 mm in height, 190 mm in length.
7. Size of alphabetical and numerical characters
 - a) Height: 63 mm;
 - b) Width: 38 mm;
 - c) Bold strokes of alphabetical and numerical characters: 10 mm;
 - d) Size of the dash (-): 14 mm in length; 10 mm in width.

Article 41. Use of walkie-talkies within AOAs

1. Walkie-talkie users must adjust their walkie-talkies at correct frequencies and maintain two-way communication, and are not permitted to interrupt communication.
2. All information communications on frequencies with the aerodrome control tower must be concise. Name of the caller and the listener must be clearly stated. The use of walkie-talkies for personal purposes is prohibited.

Article 42. Use of hand signals

1. Hand signals are used to guide ground vehicle/equipment operator and towing and pushing director to the tractor driver, the wingwalkers to the towing and pushing director and tractor driver.
2. The use of hand signals shall be subject to IATA's IGOM.
3. Aviation service providers at airports and aerodromes must provide instructions on use of hand signals to staff working in AOA's.

Article 43. Gathering vehicles and equipment when not in operation

1. Vehicles and equipment, when in operation, must be parked at the specified gathering location on an apron painted with markings or in the vehicle and equipment assembly yard.
2. When parked at the gathering location, the vehicle must have its handbrakes deployed, wheels chocked or stabilizer deployed.
3. Vehicles and equipment must be orderly arranged without obstructing escape routes and obstructing other vehicles and equipment.
4. In the case of high winds, vehicles and equipment when not in operation must be tied down and fixed so as not to be swept out of the assembly area.

Article 44. Initial handling of incidents and occurrences related to people and vehicles operating within AOA's

1. The vehicle or equipment operator shall inform air traffic controllers immediately and airport or aerodrome operator of an incident or breakdown of the vehicle or equipment operating on a runway or taxiway or on an apron.
2. The entity managing and operating vehicles or equipment operating within an AOA must relocate vehicles or equipment having technical problems or suffering damage to a safety area at the request of the airport or aerodrome operator; is not permitted to repair vehicles or equipment on the runway, taxiway or apron.
3. If the entity managing and operating vehicles or equipment fails to carry relocate or delays implementing the plan to relocate vehicles and equipment, affecting flight operations, the airport or airport operator shall organize the relocation. If the entity managing and operating vehicles or equipment shall collaborate and reach an agreement with the airport or aerodrome operation for the latter's relocation of the vehicles or equipment.
4. Upon discovering a fire incident or occurrence, persons working within an AOA must:
 - a) quickly extinguish the fire with on-site fire-fighting means and equipment, and at the same time seek out all measures to isolate the fire from aircraft and other vehicles;

b) immediately inform the aerodrome control tower and airport or aerodrome operator for the purpose of controlling aircraft operations, and inform the vehicle or equipment operator for incident handling.

5. Upon discovering a collision incident or occurrence, persons working within an AOA must:

a) Keep the scene preserved until a competent authority arrives;

b) inform the aerodrome control tower, airport or aerodrome operator, airport authority and competent authorities for handling purpose.

6. Upon discovering an fuel spill incident or occurrence, persons working within an AOA must:

a) immediately clean up the spill;

b) immediately inform the aerodrome control tower and airport or aerodrome operator in the event that fuel spill spreads over an area of more than 04 m².

7. The aerodrome control tower and airport or aerodrome operator shall cooperate in informing persons and vehicles so that they do not move through the fuel spill area; requesting vehicles operating in the vicinity to move away from the spill area or shut down the engines.

SECTION 3. MINIMUM SAFETY UPON PROVISION OF AVIATION SERVICES

Article 45. Provision of follow-me services

1. Upon marshalling an aircraft, the follow-me vehicle and the aircraft must maintain a distance from around 150 m to 200 m.

2. The follow-me vehicle operator must strictly obey the aerodrome control tower's instructions during the marshalling process.

3. The follow-me services shall be provided to arriving and departing aircrafts or vehicles occasionally operating within the AOA upon request.

Article 46. Provision of aircraft pushing and towing services

1. Upon providing aircraft pushing and towing services, the tractor and towbars must be appropriate to each type of aircraft serviced.

2. The tractor driver must correctly comply with the operation procedures.

3. When driving a tractor, the driver must comply the following speed limits:

a) Not exceeding 10 km/h upon towing or pushing an aircraft;

b) Not exceeding 25 km/h upon letting the tractor idle in drive.

4. During aircraft towing or pushing operations, do not:

a) accelerate or stop suddenly;

b) let any person hang from the tractor's cabin;

c) place wheel chocks or other objects on the towbars;

d) let any person stand or sit on the towbars;

dd) put the tractor in reverse gear to tow the aircraft.

5. When towing or pushing an aircraft under night or foggy conditions, make sure that the anti-collision lights and wingtip lights are switched on and the high beam headlights and signal lights on the tractor's roof are switched on.

6. There must be wingwalkers during towing or pushing operations in the following cases:

a) The anti-collision lights and wingtip lights cannot be switched on and there must be wing walkers stationed at each wingtip;

b) Construction or repair is being carried out on the taxiway or in the vicinity of the aircraft stand, reducing the safety distance from the aircraft;

c) Weather conditions cause low visibility during towing or pushing operations;

d) When the aircraft is pushed in or back from; taxis or taxis from or to its stand but there is another aircraft, vehicle or equipment next to it, there must be wing walkers stationed at each wingtip.

7. Before pushing or towing an aircraft, the tractor driver and towing and pushing director must inspect and supervise other vehicles and equipment to ensure that they stay clear of the aircraft safety area on the stand; tow or push the aircraft following the instructions given by the towing and pushing director and maintain two-way communication with the air traffic controllers.

8. During towing or pushing an aircraft from the taxilane on the apron to the aircraft stand and vice versa, the tractor driver shall obey all orders given by the towing and pushing director, the towing and pushing director must stay within the sight of the tractor driver and aircraft technician, and at the same time keep a safe distance of at least 03 m from the tractor and aircraft nose. The wing walkers must observe the aircraft's wingtips and the rear of the aircraft to ensure safety during towing and pushing operations.

9. It is only allowed to tow and push an aircraft on the prescribed taxilane. Upon towing and pushing the aircraft, the maximum nose gear steering angle must not be exceeded.

Article 47. Operation of passenger boarding bridges

1. In case the forecast wind speed exceeds 48 km/h, the passenger boarding bridge (PBB) after docked to an aircraft must have its wheel chocks in place.
2. In case the forecast wind speed exceeds 96 km/h, the PBB must be rotated to avoid facing the wind and minimize surface exposed to the wind. The PBB must be retracted, fully lowered and have its wheel chocks in place. It is not permitted to rotate the bridge a total of more than 87.5° from the centerline unless otherwise permitted by the PBB manufacturer's specifications.
3. In case the forecast wind speed exceeds 144 km/h:
 - a) Retract the PBB tunnels to an inactive positions; park the PBB so that its center is positioned on the tie-down points on the apron surface. The PBB is positioned so that the tie-down straps are perpendicular to the centerline of the bridge when fully retracted;
 - b) The strap hooking edges are placed close to the end of the PBB cabin, welded to the I-shaped beam bar to support the control cabinet;
 - c) If there are no positions where the PBB can be tied down on the apron surface as prescribed in Points a and b of this Clause, the passenger boarding bridge must have its wheel chocks in place and follow the procedures when the wind speed exceed 96 km/h;
 - d) Stop operating the passenger boarding bridge.
4. In the event that the PBB encounters a difficult situation or is uncontrollable or unbalanced, the PBB staff must keep its status quo, suspend its operation and immediately report to the technical department.
5. On a PBB, there must be signs stating height restrictions for vehicles and equipment operating under the PBB; paint height restriction markings for vehicles and equipment operating under the PBB on service roads and under the PBB if necessary to enhance operational safety measures. For a PBB that does not have a hurricane tie-down system, retract passenger bridge branches to non-operating positions; lower the bridge height to the lowest level, place wheel chocks and rotate the cabin to a position opposite to the wind direction.
6. Staff operating a PBB must not leave it until all passengers have disembarked or embarked the aircraft, unless the staff only performs the functions providing other PBB ancillary services such as power supply, cool air and potable water but ensures that the PBB's control panel is locked and the control system cannot be affected.
7. A PBB is used together with synchronous technical services associated with the PBB. In the event that the PBB has a technical problem, the use of technical services shall be subject to agreement between the user and the entity authorized to provide services at the airport.

Article 48. Provision of electric power supply services

1. Approach and connect power cables only after wheel chocks have been placed on the aircraft nose landing gear.
2. The aircraft ground power unit must be parked a position corresponding to the position where the electric power supply is performed according to the manufacturer's documents and at least 03 m from the aircraft fuel vents and fueling vehicle. Brakes must be deployed and wheel chocks must be placed.
3. The ground power unit operator must check the specifications on the vehicle's control panel to ensure that they are compatible with the aircraft's power source as specified by the manufacturer before supplying power.
4. Operator operating ground power unit or electric power supply system at a PBB must check power cables to ensure their insulation and corrosion resistance and ensure that their sheaths do not tear. Electrical plugs connected to the aircraft must be clean, dry and undamaged, and maintain good contact with the electrical sockets on the aircraft.
5. During the electric power supply, the ground power unit must meet the technical specifications of the power supplied.
6. During the electric power supply, technical staff must not leave their working position and must cooperate with the mechanic staff and headset staff during the electric power supply to the aircraft to ensure safety during the service provision.
7. It is not permitted to repair or clean parts of equipment during electric power supply.

Article 49. Provision of air supply services

1. Operators of air start units must follow manufacturer's technical procedures and instructions for use for each type of air start unit.
2. Gases passing through air start units must meet technical and medical standards as prescribed in the user manual for of each type of air start unit. It is not allowed to load gases that do not meet technical and medical standards or are expired onto the aircraft.
3. The use of accumulators that have exceeded their service life as prescribed is prohibited.
4. Greasy rags or tools are not permitted to contact oxygen supply units.
5. When working with an air start unit, the technician should be familiar with the chart indicating pressure-temperature relationship for gases specified in the user manual to ensure safe operation.
6. Air supply valves must not be open suddenly when supplying air to an aircraft.
7. Air pipe connections must not be removed or installed until the residual pressure in the piping system is fully released.

8. The residual pressure in the piping system must be released before supplying the air; air pipe connections should be carefully covered and kept clean and dry when not supplying air.

9. The oxygen supplied to an aircraft must meet the standards. When supplying oxygen an aircraft, adequate and appropriate fire-fighting equipment must be arranged and anti-explosion lights must be used if necessary.

Article 50. Provision of aircraft refuelling services

1. The aircraft refueling must be subject to regulations of law on assurance of aviation fuel engineering and regulations of this Article.

2. Except where it is not allowed to fuel an aircraft according to regulations of law on assurance of aviation fuel engineering, when refueling, passengers may embark, disembark or stay on the aircraft if the following requirements are satisfied:

a) There is an agreement with the airport or aerodrome operator to ensure the compatibility with the airport's rescue and fire fighting capacity;

b) The airline representative or the ground services unit authorized by the airline must notify the passengers and staff on board the aircraft of the refueling;

c) Passengers and staff on board the aircraft are not permitted to use any equipment that may cause a fire;

d) For a flight that does not use a PBB, self-propelled telescopic passenger stairs must be available at the aircraft doors in order for passengers and staff to make their escape in the event of an incident;

dd) Fire engines must be in place at on-call fire stations.

Article 51. Filling other liquids into aircrafts

1. Aviation service providers must use specialized means when loading different liquids. The connection and filling of liquids into aircraft systems shall be carried out using suitable connectors.

2. All liquids filled into the aircraft must be suitable for the types of liquids on the aircraft and meet technical standards. Aircraft must not be filled with liquids that do not meet technical standards.

3. Liquid filling equipment must be regularly checked for cleanliness of its piping system. Pipe ends must be covered after use to prevent entry of dust, steam and water.

4. When the filling of a liquid into an aircraft requires pressure, make sure that residual pressure has been fully released from the equipment's hydraulic system. The hydraulic pump is turned on

to supply liquid to the aircraft only when an adequate amount of liquid has been provided to the hydraulic system.

5. Liquid pipe connections must not be removed or installed until the residual pressure in the hydraulic system is fully released.
6. When working with such liquids as hydraulic fluids of the aircraft hydraulic which are toxic to humans and environment, it is required to strictly comply with the regulations stated in the user manual.
7. Special attention should be paid to the liquids that affect coatings, adhesion or tightness or limit oxidation during the filling process. Do not spill liquid out. Clean up the spill if it occurs.
8. Equipment filling liquids to an aircraft shall be operated by technicians having the operation license in conformity with the user manual.

Article 52. Loading or unloading of cargo and baggage onto or from aircrafts

1. Operator of a unit load device must maintain an appropriate distance from the unit load device to the cargo compartment during the loading or unloading of cargo and baggage. Great caution must be exercised when opening and closing a cargo compartment.
2. Pulling a lever in the aircraft's cargo compartment must comply with the aircraft operations document and obtain the aircraft operator's consent.
3. The operation and inspection of manually pushed containers and pallets must be kept under strict control.
4. Do not load cargo beyond the capacity of containers and pallets; do not over tighten pallet nets to avoid warping of pallets.
5. Pay attention to latches and edge rails when pushing pallets and containers on equipment equipped with rollers or wheels; do not walk on the rollers and wheels.
7. Handling staff must not stand on the floor of a forklift while it is in operation; guide bars must be placed in a correct position when loading or unloading cargo.
8. When approaching an aircraft, maintain a distance between the rubber dock bumper of the conveyor belt loader, forklift, catering truck, self-propelled telescopic passenger stairs and the aircraft door in a manner that is suitable for the vertical position of the aircraft due to aircraft load change.
9. The conveyor belt loader is operated only when it has approached the correct position; while loading or unloading cargo and baggage, handling staff must not travel on the conveyor belt of the loader in motion.

10. Staff are only permitted to step from an aircraft's cargo compartment door to a vehicle or vice versa when it has come to a complete stop and been in a stable state.

Article 53. Provision of other services in AOA's

1. When approaching an aircraft, the self-propelled telescopic passenger stair, PBB, catering truck and boarding/de-boarding vehicle for passengers with reduced mobility must ensure that its upper rubber bumpers maintain a safe distance from the aircraft fuselage according to IATA's recommendations or airline's operations document.

2. When approaching and leaving an aircraft, the catering truck must ensure that its upper deck is located at a position that does not affect the opening of the aircraft door; there must be an aircraft door sill protector when towing the catering truck from the catering truck high loader.

3. Every lavatory service vehicle and portable water truck must have a work platform as specified in the operations manual. The operator must not work on the platform if the vehicle is in motion; vacuum hoses and feeders must be retracted before the vehicle moves.

4. No more than 4 dollies are attached to a ramp equipment tractor and the total length of the dollies must not exceed 12.2 m, excluding the length of the towing bar. Before towed, cargo dollies must be covered and tow bars are securely hinged; only remove the dolly from the tractor when the tractor has come to a complete stop; don't run and drop the dollies.

Article 54. Control of lighting equipment's impact on flight activities

1. The operator of an airport or aerodrome shall preside over and cooperate with the air navigation service provider at an airport in formulating diagrams on the range of effect on flight activities of laser lamps and high-intensity lighting devices in the aerodrome operation literature; and send such diagrams to the entities operating in the airport or aerodrome and relevant local authorities for control cooperation.

2. The airport authority shall preside over and cooperate with the airport or aerodrome operator and local authority in disseminating regulations on and organize control of use of laser lamps and high-intensity lighting devices in the vicinity of the airport or aerodrome.

Article 55. Radio communication

1. Radio communication in airports and aerodromes shall be subject to regulations of law on management of radio frequencies and on civil aviation.

2. Individuals and organizations utilizing radio devices in airports and aerodromes, upon being licensed by competent authorities, shall cooperate with the airport authority, airport or aerodrome operator and air navigation service provider in ensuring safety during operations, facilitating quick and accurate detection of interference sources and handling the interference.

SECTION 4. OPERATIONAL SAFETY DURING CONSTRUCTION

Article 56. General regulations

1. The construction and installation of equipment for newly built, repaired and renovated facilities; dismantling of facilities; warranty and maintenance of facilities and deployment of facilities at airports and aerodromes shall be subject to regulations on operational safety at airports and airfields; plans to ensure security and safety during construction approved by competent authorities; construction measures approved by investors and other relevant regulations.

2. Regarding such regular and unscheduled repair activities as repair of houses and working offices of entities at airports, repair of water supply and drainage systems, repair of lighting systems, maintenance and repair of office equipment, repair of facilities and technical facility items and installation of advertising facilities which do not affect security and operational safety in AOA and do not change premises of facilities in the relevant operations documents, airport and aerodrome operators and facility operators shall carry out such activities in a manner that does not affect security and operational safety as prescribed.

Article 57. Responsibilities of an investor

1. Preside over and cooperate with the construction unit in formulating a plan to maintain security, safety and environmental hygiene at the airport or aerodrome during construction enclosed with a adjusted plan to operate runways, taxiways, aprons, passenger terminals or cargo terminals or adjusted plan to operate the system of air navigation equipment (if any) so as to reach an agreement with the airport or aerodrome operator thereon before submission to a competent authority for consideration and approval as prescribed.

2. Cooperate with the airport or aerodrome operator in disseminating regulations on security, safety and communication during construction in restricted areas of the airport or aerodrome.

3. Assign a person to cooperate with entities at the airport or aerodrome during construction at the airport or aerodrome.

4. Request the construction unit and supervision unit of the investor to cooperate with the airport or aerodrome operator and competent agencies at the airport or aerodrome during construction in immediately addressing any issues that arise affecting operational safety of the airport or aerodrome during construction.

Article 58. Responsibilities of an construction unit and construction unit of an investor

1. Disseminate and provide training in regulations on security, aviation safety and fire fighting to officials and staff; provide instructions on traveling routes and communication methods to persons and vehicles involved in construction in accordance with regulations on security and operational safety at the airport or aerodrome and on the plan to maintain security, safety and environmental hygiene at the airport or aerodrome approved by the competent authority.

2. Assign a person to be in charge of cooperating with entities at the airport or aerodrome during construction.
3. Comply with regulations on maintaining safety, security, environmental hygiene, fire fighting and traveling routes during construction; adopt measures to control their people and vehicles entering areas other than the construction areas of the construction unit.
4. The construction unit must provide appropriate firefighting facilities and equipment at the construction areas; the use of liquefied petroleum gas cylinders and oil and gas tanks at the construction areas shall be subject to regulations on fire fighting.
5. The construction unit must put up fences, signs and markings, and install warning lights around the construction areas according to the approved plan to maintain security, safety and environmental hygiene at the airport or aerodrome in order to prevent FOD from affecting air navigation safety.
6. The construction supervision unit shall carry out supervision of construction activities in accordance with the approved plan to maintain security, safety and environmental hygiene at the airport or aerodrome during construction; regularly supervise the management and use of construction tools and dangerous items of the construction unit.
7. The construction unit's person in charge of construction and the supervision unit's person in charge of construction supervision in an AOA must be equipped with walkie-talkies or suitable equipment to communicate with the Aerodrome Control Tower; obey all instructions given by air traffic controllers.
8. The construction unit and supervision unit of the investor shall be subject to inspection and supervision by the airport or aerodrome operator and competent agencies at the airport or aerodrome during construction.

Article 59. Responsibilities of an airport or aerodrome operator

1. Preside over and cooperate with relevant units in reaching an agreement on a plan to ensure security and safety upon construction, renovation, upgrade, maintenance and repair of facilities and installation, maintenance and repair of equipment within an airport or aerodrome without affecting operations at the airport or aerodrome before submitting it to a competent authority for consideration and approval.
2. Cooperate with the investor and construction unit in completing the assessment of changes, identifying the hazards affecting the operational safety during construction and proposing solutions to minimize hazards in accordance with regulations laid down in the safety management system documentation.
3. Disseminate regulations on security, operational safety and communication to construction units, investors and construction supervision consultancies in restricted areas of the airport or aerodrome. Deploy forces to regularly inspect and supervise construction activities, request

investors and construction units to strictly comply with the approved plan to maintain security and safety; do not let FOD from the construction areas appear in the movement area of the airport.

4. Notify the issues concerning construction activities in the AOA to relevant units at the airport or aerodrome for cooperation in managing operations at the airport and aerodrome to ensure security, safety and efficiency. The following shall be notified:

a) Task details;

b) Construction unit;

c) Supervision unit;

d) Starting and ending time;

dd) Location and scale of the facility;

e) Plan of the construction location;

g) Total number of persons and types of vehicles and equipment involved;

h) Communication equipment;

i) Notes and warnings during construction (if any).

5. Closely cooperate with air navigation service providers at the airport or aerodrome in the process of providing air traffic control services to ensure absolute air navigation safety at the airport or aerodrome.

6. Organize periodic or unscheduled safety meetings with investors and construction units to review and discuss security and safety issues; promptly handle issues that arise affecting security and operational; request competent authorities to promptly amend and supplement the approved plan to maintain security and safety and organize coordination of safe and efficient operations during construction.

Article 60. Main contents of the plan to maintain security and safety at an airport or aerodrome

1. Determining the scope of tasks, boundary of the construction area shown in detail by the boundary fence between the construction area and the airport's or aerodrome's operating area; traffic routes of people and vehicles during construction, material gathering location, temporary waste material dump site (if any), parking lots for construction vehicles and equipment and temporary construction camp for people engaged in construction.

2. Determining starting and ending time of construction. The construction time must be sufficient for publishing of aeronautical information in cases where aeronautical information must be published as prescribed.

3. Identifying extent of impacts of construction activities on areas and floating and underground facilities, air navigation facilities and equipment; potential impacts of height of vehicles, equipment, gathering materials and operational safety issues that may arise during construction.

4. Determining the process for handling and plan for minimizing impacts of the construction on the daily operations and operational safety at the airport or aerodrome.

5. Determining a plan to carry out construction under low visibility conditions, especially construction in restricted areas of the airport or aerodrome and near electric power supply systems and underground facilities.

6. Determining main technical specifications of the facilities and equipment expected to be put into operation so as to publish aeronautical information in cases where aeronautical information must be published as prescribed.

7. Ensuring the compliance by people, vehicles and equipment engaged in construction at the airport or aerodrome, including:

a) A plan to identify and control entry of people and vehicles participating in construction into restricted areas of the airport or aerodrome;

b) A mechanism for communication and cooperation between investors, construction units and the aerodrome control tower, airport or aerodrome operator and facility operator during construction for cooperation in handling issues that arise, especially the procedures for determining locations of and protecting underground facilities within the construction area;

c) A plan to ensure persons involved in construction are trained in regulations of control of persons, vehicles, security, safety, environmental safety and fire safety during construction in restricted areas of the airport or aerodrome;

d) Maintenance of communication and environmental hygiene; control of flammable materials and fire fighting; control of entry of FOD into the airport's or aerodrome's operating area;

dd) Investors, supervision consultancies and construction contractors' procedures for internal control, including an investor's plan to handle people and vehicles violating regulations on security and safety at the airport or aerodrome;

e) A plan to relocate damaged construction vehicles to ensure air navigation safety; storm preparedness plan.

SECTION 5. OPERATION UNDER EXTREME WEATHER CONDITIONS

Article 61. Operation under low visibility conditions

1. Personnel and vehicles must not move into ILS critical/sensitive areas when there are flight operations and are allowed to stop and hold at holding positions as prescribed.
2. The airport or aerodrome operator shall cooperate with the aerodrome control tower in preventing personnel and vehicles from operating within ILS runway critical/sensitive areas during application of low visibility conditions.

Article 62. Operation in case where wind speed exceeds 20 m/s (75 km/h)

1. Aircraft must be chocked, braked and tied down according to the aircraft operator's storm preparedness plan.
2. For ground vehicles and equipment, the following shall be performed:
 - a) Move them to their parking position;
 - b) Restrict towing and pushing of aircrafts from or to their stands;
 - c) Stop refuelling aircrafts.

Article 63. Operation under extreme weather conditions

1. When receiving information about dangerous weather or observing thunder, lightning flash or lightning strike, the units must immediately inform staff operating in the AOA.
2. Staff working in an AOA must not take shelter under any part of the fuselage or aircraft wings when they notice thunder, lightning flash or lightning strike; proactively move to structures with roofs against lightning for shelter when not on other emergency duty.
3. Stop working at height.
4. Stop refuelling.
5. Headset communication between ground personnel and personnel on board the aircraft is prohibited.
6. Do not load or unload explosives or flammable materials.
7. Restrict activities in unsafe areas at risk of being struck by lightning (such as open spaces, under tall trees; metal objects such as metal fences, railings, pipes, light poles).
8. The operator of an airport or aerodrome shall reach an agreement in the form of a written agreement or mechanism for cooperation with an air navigation service provider in providing

and exchanging information about extreme weather threatening operations in the airport or aerodrome; shall notify entities of extreme weather conditions in the airport or aerodrome.

SECTION 6. RELOCATION OF IMMOBILE AIRCRAFTS

Article 64. Responsibility for relocation

An immobile aircraft shall be relocated to avoid interference with normal operation of the airport or aerodrome. The relocation of an immobile aircraft shall be burdened upon the operator of such aircraft.

Article 65. Requirements for organizing relocation

1. The airport or aerodrome operator shall formulate an immobile aircraft relocation plan which determines and notifies phone numbers and fax of the authority assigned to handle relocation of damaged aircrafts in an operations area or its vicinity. The immobile aircraft relocation plan must be specified in the aerodrome operation literature.
2. The airport or aerodrome operator shall notify the scope and its capacity for relocation of immobile aircraft relocations in an AOA or its vicinity to the aircraft operator.
3. An inoperative or immobile aircraft that remains in an area where flight operations occur shall be relocated to avoid interference with normal aviation activities. The operator of an inoperative aircraft shall relocate the aircraft as per the request and instruction of the operator of the airport or aerodrome.
4. The relocation of an immobile aircraft in an aerodrome shall proceed in the following order:
 - a) Determine the damage level of the aircraft in distress at the earliest time to notify the requirement to the relocation service provider for its swift arrival and delivery of service on contract basis, anticipate the schemes to cooperate in relocation;
 - b) Establish pathways for special vehicles' relocation of the aircraft;
 - c) Remove the accumulator or ground wire, remove the power supply from the conductor bar; ventilate the interior of the aircraft, extinguish fire at positions where smoke belches, clean fluids and dirt inside the fuselage and on the ground prior to relocation. Reduce the weight of the aircraft by draining oil, clearing cargo and dismantling removable parts of the aircraft to ease its relocation;
 - d) Transport specialists and relocation equipment outsourced by the relocation service provider to the scene; prepare the personnel and devices to cooperate with the relocation service provider in the steps of relocation;
 - dd) Move the aircraft and make repairs according to the scheme approved in the aerodrome operation literature;

e) After the relocation of the aircraft, clear the ground and examine the overall status.

5. Requirements during the relocation:

a) Fire engine(s) and ambulance(s) shall be present and ready at the scene;

b) The communication with the aerodrome control tower and relevant agencies shall be maintained to avoid interference with flight operations on other runways of the aerodrome;

c) The relocation process does not worsen the aircraft's damage unless otherwise decided by the owner or operator of the aircraft if it is so broken that repair is infeasible;

d) The relocation position is convenient for the process and available for the aircraft to remain in a long time;

dd) Smoking is not allowed during the relocation process;

e) The relocation of the aircraft is subject to the authorization of the investigation agency.

6. The operator of the aircraft shall collaborate with the operator of the airport or aerodrome to guard and protect the damaged aircraft relocated to an aircraft stand defined in the plan for relocation of inoperative aircrafts for the investigation of aircraft incident pursuant to regulations.

7. The collaboration plan for handling immobile aircrafts in the airport or aerodrome shall indicate the location of the onsite command committee, important phone numbers and pathways for aircraft relocation vehicles.

8. The airport or aerodrome operator shall comply with all aeronautical information procedures in cases where the airport or aerodrome operation is affected as prescribed.

9. If an immobile aircraft is located in an area where flight operations occur but the operator of the aircraft fails to be identified, the operator of the airport or aerodrome shall relocate such aircraft to a position that does not affect normal aviation activities of the airport or aerodrome.

SECTION 7. MAINTENANCE OF HYGIENE IN AOAS AND CONTROL OF FOD

Article 66. Environmental hygiene in AOA

1. Entities and personnel operating within an AOA are not allowed to pour petrol and oil or dispose of garbage and waste within the AOA.

2. Garbage and waste from the AOA must be collected, transported and treated pursuant to regulations.

3. Ground vehicles and equipment must be hygienic to prevent FOD and maintain environmental hygiene.

4. Entities operating within an AOA shall maintain their controls to prevent FOD in the assembly area managed and operated by such entities.

Article 67. Control of FOD

1. Vehicles and equipment operating in an AOA must be periodically and irregularly inspected and maintained to ensure that such vehicles and equipment do not drop within the AOA during their operation.

2. Vehicles and equipment operating in the AOA must be checked to ensure that their accompanied objects and tools do not drop; must be identified with symbol of the unit managing and using them.

3. The units whose staff regularly work in the AOA must establish procedures for managing working tools so as not to leave or lose tools in the AOA.

4. The units regularly operating in the AOA must establish procedures for controlling and cooperating with the airport or aerodrome operator in controlling FOD in the area where vehicles and equipment managed by such units are assembled and other movement areas in the AOA.

5. The staff directly servicing an aircraft shall, before and after their servicing, inspect the aircraft stand and clear FOD generated during servicing of the aircraft at its stand.

6. The airport or aerodrome operator must provide FOD containers in the AOA. FOD containers must be conspicuously placed, covered and properly secured to ensure that they are not moved during a storm and regularly cleaned to prevent garbage and DOD from overflowing. The airport or aerodrome operator must notify locations of FOD containers in the AOA to entities operating in the AOA.

7. If a person working in the AOA detects FOD, he/she must collect and place it in a designated place. In case it is not possible to collect FOD, he/she must notify the aerodrome control tower and airport or aerodrome operator.

8. Every entity operating in the AOA shall disseminate information on FOD to their personnel working on the AOA and request them to collect and place FOD in designated FOD containers; not to put garbage collected from offices and aircrafts and objects collected after servicing aircrafts in FOD containers located in the AOA.

SECTION 8. SAFETY MANAGEMENT SYSTEM

Article 68. General regulations on safety management systems at airports or aerodromes

1. A safety management system (hereinafter referred to as “SMS”) is composed of safety policy, safety objectives, safety risk management, safety assurance and safety promotion for organizations involved in civil aviation activities at airports and aerodromes of Vietnam.
2. The following organizations shall develop and establish an SMS in accordance with regulations and appropriate to their size and the complexity of their aviation services:
 - a) Airport and aerodrome operators;
 - b) Other aviation service providers, including providers of passenger terminal operation services; terminal and cargo warehouse operation services; air fuel services; ground-based commercial services; air catering services; aviation vehicle and equipment maintenance and repair services.
3. Every aviation service provider shall develop SMS documentation in conformity with that of the airport or aerodrome operator.
4. The airport or aerodrome operator shall promulgate regulations on safety at the airport or aerodrome, containing specific matters about operational safety within its jurisdiction and procedures for fulfillment or cooperation between units regularly operating within the aerodrome in fulfillment of the requirements for operational safety at the airport or aerodrome.
5. The airport or aerodrome shall supervise the abidance by the regulations on aerodrome safety assurance; expose and transfer violations to the relevant airport authority pursuant to regulations.
6. The CAAV and airport authorities Civil shall inspect and supervise the application of the aerodrome SMS.
7. Safety management personnel of aviation service providers must possess records proving that they have joined SMS training courses.
8. Other aviation service providers must develop and establish an emergency response plan and ensure that it is implemented in conformity with that of the airport or aerodrome operator and other associated organizations (if any) during the service provision.

Article 69. Structure of SMS documentation

1. SMS framework contains at least the following:
 - a) Safety policy and objectives;
 - b) Safety risk management;
 - c) Safety assurance;
 - d) Safety promotion.

2. Safety policy and objectives include:

- a) Management commitment;
- b) Safety accountability and responsibilities;
- c) Appointment of key safety personnel;
- d) Coordination of emergency response planning;
- dd) SMS documentation.

3. Safety risk management includes:

- a) Hazard identification;
- b) Safety risk assessment and mitigation.

4. Safety assurance includes:

- a) Safety performance monitoring and measurement;
- b) Management of change;
- c) Continuous improvement of the SMS.

5. Safety promotion includes:

- a) Training and education;
- b) Safety communication.

Article 70. Specific requirements for safety policy and objectives of the SMS

1. The organization must formulate a safety policy which shall include management commitment and shall:

- a) Reflect its commitment to safety;
- b) Include a clear statement about the provision of the necessary resources for the implementation of the safety policy;
- c) Include the safety reporting procedures;

d) Clearly indicate which types of behaviors are unacceptable related to the service provider's aviation activities and include the circumstances under which disciplinary action would not apply;

dd) Be signed by the accountable executive of the organization;

e) Be communicated, with visible endorsement, throughout the organization; and

g) Be periodically reviewed to ensure it remains relevant and appropriate to the organization.

2. The organization must establish safety objectives which shall form the basis for safety performance monitoring and measurement and shall:

a) Reflect the organization's commitment to maintain or continuously improve the effectiveness of the SMS;

b) Be communicated throughout the organization; and

c) Be periodically reviewed to ensure they remain relevant and appropriate to the organization;

3. The organization must identify safety accountability and responsibilities in accordance with the following requirements:

a) Identify the accountable executive who has ultimate responsibility and accountability, on behalf of the organization, for the implementation and maintenance of the SMS;

b) Clearly define lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management;

c) Identify the accountabilities of all members of management, as well as of employees, with respect to the safety performance on the part of senior management;

d) Document and communicate safety responsibilities, accountabilities and authorities throughout the organization; and

dd) Include a definition of the levels of management with authority to make decisions regarding safety risk tolerability.

4. The safety manager of an airport or aerodrome operator shall implement and maintain the effectiveness of the SMS; satisfy the requirements applicable to key personnel of the airport or aerodrome operator.

5. The safety managers of other aviation service providers specified in Point b Clause 2 Article 68 must fulfill the following requirements:

a) Be knowledgeable about the SMS;

b) Have at least 5 years' experience in the specialty approved by an aviation service provider;
and

c) Possess a certificate of completion of SMS training courses.

6. SMS documentation

a) The organization shall develop and maintain SMS operational records as part of its SMS documentation, which specify its approach to safety management in a manner that is appropriate to its safety objectives;

b) The organization must develop and maintain SMS documentation updated practically.

Article 71. Specific requirements for safety risk management

1. Hazard identification

a) The organization shall develop and maintain a process that ensures that hazards associated with its aviation products or services are identified;

b) Hazard identification shall be based on a combination of reactive, proactive and predictive methods of safety data collection.

2. Safety risk assessment and mitigation

The organization shall develop and maintain a process that ensures analysis, assessment and control of the safety risks associated with identified hazards.

Article 72. Specific requirements for safety assurance

1. Safety performance monitoring and measurement

a) The organization shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risk controls;

b) The organization's safety performance shall be verified in reference to the safety performance indicators and safety performance targets of the SMS in support of the organization's safety objectives.

2. Management of change

The organization shall develop and maintain a process to identify changes which may affect the level of safety risk associated with its aviation products or services and to identify and manage the safety risks that may arise from those changes.

3. Continuous improvement of the SMS

The organization shall monitor and assess its SMS processes to maintain or continuously improve the overall effectiveness of the SMS.

Article 73. Specific requirements for safety promotion

1. Training and education

- a) The service provider shall develop and maintain a safety training program that ensures that personnel are trained and competent to perform their SMS duties;
- b) The scope of the safety training program shall be appropriate to each individual's involvement in the SMS.

2. The organization shall develop and maintain a formal means for safety communication that:

- a) ensures personnel are aware of the SMS to a degree commensurate with their positions;
- b) conveys safety-critical information;
- c) explains why particular actions are taken to improve safety; and
- d) explains why safety procedures are introduced or changed.

Article 74. List of non-conforming items

1. A list of non-conforming items contains an airport's or aerodrome's facilities and equipment that fail to satisfy the regulations laid down in this Circular, technical regulations and standards in force in regard to:

- a) Requirements for aerodrome infrastructure and facilities and technical infrastructure serving air navigation;
- b) Requirements for aviation obstacle management.

2. The airport or aerodrome operator shall determine non-conforming items, identify hazards and assess risks according to the SMS for facilities and equipment on the list of non-conforming items and prepare a plan to rectify deficiencies in the list of non-conforming items.

3. The list of non-conforming items are elaborated in the aerodrome operation literature. The airport or aerodrome operator, when detecting or being warned about the facility items failing operational standards during the progress of operation, shall be responsible for reviewing, analyzing and updating the aerodrome operation literature and reporting to the CAAV for notification as per regulations.

4. The CAAV shall supervise, urge and request the airport or aerodrome operator to rectify deficiencies in the list of non-conforming items in the aerodrome operation literature.

SECTION 9. REPORTING AND INVESTIGATING ACCIDENTS, INCIDENTS AND OCCURRENCES REGARDING OPERATIONAL SAFETY AND REPAIR OF DAMAGE CAUSED BY ACCIDENTS AND INCIDENTS AT AIRPORTS AND AERODROMES

Article 75. General regulations on reporting and investigating accidents, incidents and occurrences regarding airport and aerodrome safety operation safety

1. The objectives of the reporting requirements are to collect, aggregate and analyze data to assess the safety of airport and aerodrome operation, identify hazards and risks that threaten airport and aerodrome safety so as to give appropriate recommendations and solutions to prevent accidents and incidents regarding operational safety of airports and aerodromes.
2. Organizations required to follow procedures for reporting accident, incidents and occurrence regarding airport and aerodrome safety operation safety include:
 - a) Airport and aerodrome operators;
 - b) Aviation service providers, including providers of passenger terminal operation services; terminal and cargo warehouse operation services; air fuel services; ground-based commercial services; air catering services; aviation vehicle and equipment maintenance and repair services.
3. Organizations and individuals operating within an airport or aerodrome shall:
 - a) make mandatory reports on incidents and occurrences regarding airport and aerodrome operation as prescribed in this Circular;
 - b) notify and provide sufficient information on incidents and occurrences related to operational safety to airport and aerodrome operators and competent authorities.
4. The CAAV shall organize the investigation, verification and explication of the accidents at level A, incidents at level B and level C unless the accidents or incidents involving aircraft are investigated according to regulations of law on aircraft accident and incident investigation; direct the settlement of accidents and incidents; issue warnings to preclude accidents and incidents; make initial and final reports to the Ministry of Transport on the accidents at level A and incidents at level B.
5. Every airport authority shall organize the investigation, verification and explication of the incidents at level D; direct the settlement of incidents; issue warnings to preclude accidents and incidents; make safety reports as requested by the CAAV; make initial and final reports to the Ministry of Transport on the incidents at level D.
6. Every organization operating in an airport or aerodrome which are involved in the causes of occurrences shall organize explication of the occurrences at level E; take measures to preclude occurrences.

7. Every organization operating in an airport or aerodrome which are involved in the causes of safety accidents and incidents shall investigate, verify and explicate accidents and incidents within its scope; take measures to preclude accidents and incidents.

Article 76. Classification of accidents, incidents and occurrences regarding airport and aerodrome operation safety

1. Accident (level A): a fatal incident that ensues during the use of aviation services in an airport or aerodrome, except for force majeure caused by natural disasters, pandemic or sudden death.
2. Serious incident (level B): an incident that severely jeopardizes safety and results in temporary closure of runway(s), taxiway(s) and/or apron(s) or temporary shutdown of an airport or aerodrome.
3. High risk incident (level C): an incident that damages the infrastructure of an airport or aerodrome; an incident that impairs the vehicles and equipment operating in an AOA resulting in the vehicles and equipment being unable to operate to provide services as planned; an incident that severely injures people or menaces the safety of people and vehicles operating in the AOA, causing direct impacts on the safety of the operation of an aircraft.
4. Low risk incident (level D): an incident of collision between a vehicle with another vehicle, a device or a person; an incident that impinges on the safety of the operation of the infrastructure of an airport or aerodrome; an incident that injures people during the operation and provision of aviation services.
5. Occurrence (level E): an event that causes no direct impact on aviation safety but affects the provision of aviation services in an airport or aerodrome.
6. According to the accident, incident and occurrence classification specified in this Circular, every airport or aerodrome operator shall produce statistics and a list of typical accidents, incidents and occurrences regarding airport or aerodrome safety operation safety at the airport or aerodrome at the CAAV's request to serve safety management at the airport or aerodrome.

Article 77. Voluntary reporting

1. Voluntary report means a report made by an organization or individual who is not required to make a mandatory report.
2. Organizations and individuals shall be encouraged and supported to make voluntary reports across the whole spectrum of operations in an airport or aerodrome for safety purposes.
3. The CAAV shall:
 - a) ensure that voluntary reports and trends developed are restrictively accessible and the information on the reporting person or organization is not disclosed or made available unless requested by competent authorities or authorized by such reporting entity;

b) protect confidentiality of voluntary reports and ensure that information disclosed in these reports shall be inadmissible for any future proceedings relating to the reporting entity;

c) implement essential measures for safe processing, examination and supervision in relation to the voluntary reports.

Article 78. Repair of damage caused by incidents and accidents at airports and aerodromes

1. If it is necessary to build a facility or install equipment to immediately repair unexpected damage caused by an incident or accident at an airport or aerodrome directly menacing aviation safety and security and, the airport or aerodrome operator shall preside over and cooperate with relevant units in implementing the plan to build and install facilities managed and used by the airport or aerodrome operator; comply with regulations on assurance of security and safety during construction, renovation, upgrade, maintenance and repair of facilities, installation, maintenance and repair of equipment in airports and aerodromes as specified in Article 50 of the Government's Decree No. 05/2021/ND-CP dated January 25, 2021; notify the aeronautical information service provider to follow aeronautical information publishing procedures as prescribed in case of affecting the aerodrome operation.

2. The airport or aerodrome operator shall take charge and cooperate with relevant units in dismantling and relocating the facility right after completing the repair of the damage caused by the airport or aerodrome accident or incident or at the CAAV's request.

SECTION 10. CONTROL OF BIRDS AND WILDLIFE

Article 79. Requirements for control and reduction of hazards from birds and wildlife

1. The control and reduction of hazards from birds and wildlife shall be subject to Vietnam's laws, ICAO's standards and guidelines.

2. The operator of an airport or aerodrome shall:

a) develop, adjust and update the airport or aerodrome bird/wildlife control program and notify it to relevant entities for cooperation in execution thereof. Such program must be adaptable and appropriate to the size and complexity of the airport or aerodrome operations; take into account the specific wildlife hazards in the local area; frequency of air traffic movements;

b) organize effective execution of the airport or aerodrome bird/wildlife control program; decide and take responsibility for the methods for expelling and controlling birds/wildlife at the airport or aerodrome; The use of firearms and exploding ammunition must be licensed by a competent authority;

c) make consolidated reports according to regulations on safety reporting or ad hoc reports at the request of the CAAV or airport authority;

d) provide information to air navigation service providers in case the movement of birds and wildlife affects flight safety in order to publish aeronautical information as prescribed.

3. The aerodrome control tower shall:

a) provide timely information to the airport/aerodrome operator and crew upon detecting birds/wildlife within the airport or aerodrome and in its vicinity;

b) receive information from the crew on the detection of birds/wildlife within in the airport or aerodrome and in its vicinity; provide such information to the airport or aerodrome operator;

c) join the airport or aerodrome operator's airport or aerodrome bird/wildlife control program.

4. The aircraft operator shall report all bird/wildlife strikes or bird/wildlife hazards observed both in the air and on the ground by such aircraft operator to the airport or aerodrome operator, CAAV and airport authority in accordance with regulations on aviation safety reporting.

5. The CAAV shall:

a) implement an inspection and supervision plan to ensure that the bird/wildlife control program is developed and implemented as part of the safety management system;

b) aggregate and notify ICAO of data on bird/wildlife strikes at the ICAO's request;

c) evaluate and develop environmental control measures to reduce airport or aerodrome bird/wildlife hazards during formulation of planning for locations and scale of the airport or aerodrome in accordance with regulations of law on airport and aerodrome planning.

6. Every airport authority shall:

a) participate in cooperating with the airport or aerodrome operator and relevant units in developing and implementing the airport or aerodrome bird/wildlife control program;

b) together with the airport or aerodrome operator, preside over working with local authorities in reducing hazards from birds/wildlife in the vicinity of the airport or aerodrome at the request of the airport or aerodrome operator or local authorities;

c) carry out inspection and supervision and give timely comments to the airport or aerodrome operator when finding that the measures to expel or remove birds/wildlife are inconsistent with regulations on airport and aerodrome operation safety; environmental regulations and regulations of law on conservation of rare birds and wildlife so as for the airport or aerodrome operator to make timely adjustments.

Article 80. Airport or aerodrome bird/wildlife control program

An airport or aerodrome bird/wildlife control program shall contain at least:

1. Description of the organizational structure of the department assigned to execute the program.
2. Roles and responsibilities of personnel related to the program.
3. Operations of the aerodrome.
4. A process to collect, report and record data on bird/wildlife strikes and observed birds/wildlife.
5. Risk assessment methodology and process.
6. A process, methods and personnel for habitat management.
7. A process, methods and personnel for expelling or removing hazardous birds/wildlife.
8. A process for liaison with relevant and non-airport agencies.
9. A process, methods and regulations on staff training.
10. A process to supervise implementation of the mitigation measures applied and assess effectiveness of the measures applied as well as effectiveness of the bird/wildlife control program.

Article 81. Regulations on reporting by aircraft operators

Every aircraft operator shall submit a bird/wildlife strike report to the CAVV and airport or aerodrome operator using the bird/wildlife strike report form and supplementary bird strike reporting form - operator costs and engine damage information provided in the Form No. 03 in the Appendix I enclosed herewith.

SECTION 11. PERSONNEL OPERATING AVIATION VEHICLES AND EQUIPMENT IN RESTRICTED AREAS OF AIRPORTS AND AERODROMES

Article 82. Employees' licenses to operate aviation equipment or vehicles in restricted areas of airports and aerodromes

1. An employee's license to operate aviation equipment or vehicle in restricted areas of an airport or aerodrome shall include:
 - a) Country's official name;
 - b) Licensing authority;
 - c) License's name;
 - d) License number;

- dd) Date of issue and date of expiry of the license;
- e) Full name, date of birth and sex of the license holder;
- g) Workplace;
- h) Scope of operation;
- i) Date of issue of rating;
- k) Rating;
- l) License regulations;
- m) Signature and seal of the licensing authority or QR code in case of using QR code;
- n) Photo of the license holder.

2. Form of the employee's license to operate aviation equipment or vehicles in restricted areas of an airport or aerodrome is provided in the Form No. 04 in the Appendix I hereof. The CAAV shall apply the form of the employee's license to operate aviation equipment or vehicles in restricted areas of an airport or aerodrome as prescribed in this Circular within 12 months from the effective date of this Circular.

3. Format of the employee's license to operate aviation equipment or vehicles in restricted areas of an airport or aerodrome:

- a) The size is 85.60 mm in width, 53.98 mm in height and 0.76 mm in thickness;
- b) Photo of the license holder is printed on the license;
- c) The license is made of plastics.

4. Ratings for the personnel operating aviation equipment or vehicles in restricted areas of an airport or aerodrome are provided in the Appendix III hereof. During operation, if other ratings are required, the CAAV shall make a report to the Ministry of Transport for addition of ratings for the personnel operating aviation equipment or vehicles in restricted areas of an airport or aerodrome.

SECTION 12. COORDINATING SLOTS AT AIRPORTS AND AERODROMES

Article 83. Slot Coordination Committee

1. The CAAV shall establish a Slot Coordination Committee to provide advice and assistance in coordinating slots and consist of representatives of Vietnamese airlines, airport and aerodrome operators, air navigation service providers and agencies affiliated to the CAAV.

2. The Slot Coordination Committee shall review and give its comments on coordination parameters and change of coordination parameters; propose solutions to increase the capacity of Vietnam's airports and aerodromes; review and give its comments on absolute indicator of the efficiency of slot use and CAAV's unexpected requests during slot coordination.

3. The CAAV shall promulgate operating regulations of the Slot Coordination Committee.

Article 84. Determination of coordination parameters

1. Airport and aerodrome operators shall impose capacity limits of terminals and aprons.

2. Air navigation service providers shall impose capacity limits of runways and air traffic control service services.

3. According to the limits specified in Clauses 1 and 2 of this Article, the Slot Coordination Committee shall review and give its comments on coordination parameters and change of coordination parameters.

4. The CAAV shall, according to the Slot Coordination Committee's comments, decide coordination parameters by adhering to the principles below:

a) Coordination parameters relating to runways and air traffic control service services must not exceed 80% of the limits specified in Clause 2 of this Article;

b) During peak periods (Lunar New Year from January 01 to February 02); summer peak from June 01 to September 02; statutory holiday period and other peak periods as requested by the Prime Minister and the Ministry of Transport), the CAAV shall consider deciding to increase coordination parameters, not exceeding 80% of the limits specified in Clause 2 of this Article.

Article 85. Determination of historic slots

1. A historic slot of a season is a series of slots correctly used with a rate of at least 80% of each series of slots determined on the historic baseline date in the previous equivalent season, being on 31 January (summer) and on 31 August (winter). The CAAV shall consider and decide to change the correct utilization ratio of each series of slots determined in the event of natural disasters, pandemic or other force majeure events in a manner that is appropriate to the IATA's request.

2. Correctly used slots

a) For take-off slots, they must be actually operated no earlier or later than the confirmed slots 60 minutes for international flights, 30 minutes for domestic flights;

b) For landing slots, they must be actually operated.

3. The correct utilization ratio is the quotient of the total number of correctly used slots and the total number of confirmed slots (for summer flight schedules: from the start of the season to August 20; for winter flight schedules: from the start to end of the season).

4. During the slot coordination process, the CAAV shall decide to adjust the indicators specified in Clause 2 of this Article by referring to comments of the Slot Coordination Committee, publish such adjusted indicators 01 week prior to the season (if there is any change to the previous season).

Article 86. Priority criteria and order of priority of slot coordination

1. The CAAV shall consider and coordinate series of slots at the start of a season in the following order of priority:

- a) Historic slots and changes to historic slots that do not impact the coordination parameters;
- b) Changes to historic slots that impact the coordination parameters;
- c) Extended slots of the immediately preceding season;
- d) Slots of an airline operated at an airport for the first time (only giving priority to confirmation of 6 slots/day);
- dd) Newly requested slots of an operating airline.

2. The CAAV shall use additional priority criteria for coordination of the slots that are yet to be confirmed in the order of priority specified in Clause 1 of this Article and newly requested slots of operating airlines in the following order of priority:

- a) Effective period of series of slots extended from the start to the end of the season;
- b) Effective longer period of series of slots given first priority;
- c) New flights to and from a country;
- d) Slots of flights serving socio-economic purposes;
- dd) Flights of airlines with a high percentage of on-time flights;
- e) International long-haul flights;
- g) New flights to and from an airport;
- h) Flights using large wide-body commercial aircraft.

Article 87. Slot coordination process

1. The CAAV shall notify airlines of list of historic slots prior to each season on the SHL Deadline date in the IATA's calendar of coordination activities.
2. According to the Initial Submission Deadline updated in the IATA's calendar of coordination activities, the airline requesting confirmation of series of slots shall send a message to the email address published on the CAAV's website. The CAAV shall consider sending consider and send the airline information on coordination (confirmation-code K, pending offer-code O or unable (refusal)-code U) of serious of slots at the start of the season on the SAL Deadline date in the IATA's calendar of coordination activities.
3. The CAAV shall consider and coordinate series of slots at the start of season according to the criteria and order of priority specified in Article 86.
4. In case the airline submits a request for confirmation of a series of slots after the initial submission deadline, the CAAV shall make a decision according to the following principles:
 - a) Such series of slots shall be only considered after the SAL deadline;
 - b) The request shall be considered on a first-come-first-served basis;
 - c) If slots are available, code K or code O or code U shall be used.
5. For a request for confirmation of a slot not a series of slots, the airline shall submit it at least 03 days before the deadline for use. The CAAV shall make a decision according to the following principles:
 - a) The slot shall be only considered after January 31 for summer season and August 31 for winter season;
 - b) The request shall be considered on a first-come-first-served basis. If slots are available, code K or code O or code U shall be used.
6. In case of ad hoc increase or decrease in coordination parameters at 01 airport, the CAAV shall make an increase or decrease corresponding to the number of slots that are being used by airlines according to according to the proportion of slots held by such airlines.
7. The airline shall return the slots that have been confirmed but unused. If the airline fails to return slots by the deadline, the calculation of historic slots or opportunities for confirmation of additional slots shall be affected. To be specific:
 - a) If the airline returns slots by January 15 for summer season and August 15 for winter season, the time corresponding to the number of returned slots shall not be included in the time for calculating historic slots;
 - b) If the airline returns the confirmed slots at least 10 days before the expected date of operation, the time corresponding to the number of returned slots shall not be included when determining

the ratio of slot utilization to the number of confirmed slots in the latest month to form a basis for confirmation of additional slots.

Article 88. Publishing of information

1. The CAAV shall consolidate the following information:

- a) Coordination parameters of airports and aerodromes;
- b) 05-year medium-term plan to increase or decrease slots;
- c) Slot confirmation results updated until the start date of season;
- d) Ratio of slot utilization to number of confirmed slots and ratio of correct utilization of slots to the number of monthly confirmed slots.

2. The information in Clause 1 of this Article shall be published on the CAAV's website.

Article 89. Regulations on application of information technology and establishment of slot databases

1. Databases in support of slot coordination

a) The CAAV shall establish a database in support of slot coordination. Main parameters of the database include coordination parameters, slot exchange messages, data on airlines' historic slots by season, updated data on confirmed slots, updated remaining slots and other necessary parameters decided by the CAAV;

b) Airport and aerodrome operators, air navigation service providers and other relevant organizations participating in transport and operation at coordinated airports shall provide data on a periodic basis as prescribed in this Circular or on an ad hoc basis at the CAAV's request.

2. The CAAV grant access to the slot management software system to Vietnamese airlines, airport and aerodrome operators, air navigation service providers, air navigation service providers and airport authorities.

Article 90. Regulations on reporting and providing information with a view to database establishment

1. Operators of airports and aerodromes shall report and provide the information as follows:

a) Reporting capacity limits of terminals and aprons twice a year upon any change thereto or upon request according to the Form No. 5.1.1 in the Appendix I hereof;

b) Reporting the use of slots by domestic and international flights on a monthly basis according to the Form No. 5.1.2 in the Appendix I hereof on the fifth of the next month;

c) Reporting the 05-year medium-term plan to increase or decrease terminal and apron capacity limits according to the Form No. 5.1.3 in the Appendix I hereof before December 15 of the reporting year with respect to data in the next year to the fifth year;

d) Reporting the confirmed number of aircrafts parked overnight to airlines according to the Form No. 5.1.3 in the Appendix I hereof before April 15 with respect to reporting of data on the winter season and before September 15 with respect to reporting of data on the next summer season;

dd) Reporting the use of slots by flight numbers on a weekly basis and carrying out aggregation based on the season according to the Form No. 5.1.5 enclosed with this Circular; weekly reporting to the CAAV on Tuesday with respect to data in the previous week and 10 days before return of historic slots according to the IATA's calendar of coordination activities with respect to data aggregated by the season. The CAAV shall provide IATA's calendar of coordination activities to airport operators.

2. Every airport authority shall report and provide information as follows:

a) Reporting the use of slots by domestic flights on a monthly basis according to the Form No. 5.2.1 in the Appendix I hereof on the seventh of the next month;

b) Reporting the use of slots by international flights on a monthly basis according to the Form No. 5.2.2 in the Appendix I hereof on the seventh of the next month;

3. Every air navigation service provider shall report and provide information as follows:

a) Reporting capacity limits of runways and air navigation services twice a year; or upon any change thereto; or upon request according to the Form No. 6.1 in the Appendix I hereof;

b) Reporting the 05-year medium-term plan to increase or decrease capacity limits of runways and air navigation services according to the Form No. 6.2 in the Appendix I hereof before December 15 of the reporting year.

Article 91. Mechanisms for supervision and management of use of slots

1. Supervision of operation of slots

a) Every airport authority shall preside over supervising operation of slots at the airport under its management; report to the CAAV on use of slots according to the Forms No. 5.2.1 and 5.2.2 in the Appendix I enclosed herewith;

b) Every airport or aerodrome operator shall establish a database, invest in information technology system to receive and process data on operation of slots by airlines and submit a report to the CAAV according to the Forms No. 5.1.1, 5.1.3, 5.1.4 and 5.1.5 in the Appendix I hereof and a report on slot operation to the airport authority according to the Form No. 5.1.2 in the Appendix I hereof;

c) Organizations directly placing and removing wheel chocks shall provide data on wheel chock placement and removal times to the airport or aerodrome operator to perform the tasks specified in Point b Clause 1 of this Article.

2. After the historic baseline date, series of confirmed slots shall remain unchanged except for type of aircraft unless the airline has correctly and sufficiently used 80% of the entire series of confirmed slots. If the airline wishes to make a change, the CAAV shall consider and permitting change of one series on one occasion.

3. For airlines whose slots are cancelled, the calculation of historic slots shall not be applied to cancelled slots.

4. Any airline that opens ticket sales without historic slots or confirmed slots will not be considered to have additional slots confirm for intended flight routes.

5. The CAAV shall only confirm weekly added slots (if any) when the airline's ratio of slot utilization to the number of confirmed slots is at least 85% and ratio of correct utilization of slots to the number of monthly confirmed slots is at least 80% according to the daylight time (from 07:00 to 19:00 local time) and night time (from 20:00 to 06:00 local time of the next day) according to the respective confirmation and request time.

6. The slots that are excluded when calculating the ratio of correct utilization of slots to the number of monthly confirmed slots include:

a) Slots that have to be amended in order to operate VIP flights; perform national security and defense tasks, organize major national political, cultural and social events at the competent authorities' request with respect to Vietnamese airlines;

b) The slots returned by airlines before the deadline specified in Clause 7 Article 87 of this Circular;

c) The slots that have been confirmed but not been correctly operated due to being beyond the airline's control (due to air traffic control, airport equipment problems, weather and other force majeure events resulting in disruption of business operations of airlines, disease prevention and control, airport closure or FIR, force majeure events prescribed by regulations of foreign aviation authorities).

7. Management of aircrafts parked overnight

a) The airport or aerodrome operator shall confirm the number of aircrafts parked overnight as registered by airlines in a manner that is appropriate to the airport capacity as prescribed in Point d Clause 1 Article 90 hereof;

b) Each Vietnamese airline shall formulate an operation plan appropriate to the number of aircrafts parked overnight specified in Point a of this Clause;

c) Any airline for which the number of aircrafts parked overnight in one season has been confirmed shall continue to maintain such number of aircrafts parked overnight in the next season.

8. The CAAV shall provide airport and aerodrome operators with data on confirmed slots immediately after sending it to airlines in order for such airport and aerodrome operators to compare and process data for reporting as prescribed in Point a Clause 7 of this Article.

Article 92. Cases in which slots are cancelled

1. An airline starts to operate during a period corresponding to 20% of the series of confirmed slots but not exceeding 05 weeks.

2. An airline has ceased to operate continuously during a period corresponding to 30% of the series of confirmed slots but not exceeding 05 weeks.

3. An airline has failed to correctly use slots during a period corresponding to 40% of the series of confirmed slots but not exceeding 07 weeks.

Article 93. Slot swap

1. Airlines are permitted to swap slots on a one-for-one basis at the same airport provided that:

a) The entire series of slots is swapped;

b) The series of slots is swapped on one occasion in a season.

2. Airlines requesting slot swaps shall send a message to the CAAV at least 01 week before the start of the season, including the following details:

a) The names of the airlines involved;

b) The slot times swapped; and

c) The period of the swap (for example, period of operation, seasons, permanent/temporary, etc.).

SECTION 13. REGULATIONS ON A-CDM

Article 94. Regulations on establishment and implementation of A-CDM

1. The A-CDM includes rules and procedures for airport stakeholders to share information and collaborate in decision-making to optimize the use of airport resources with a view to:

a) Increased predictability of air traffic;

b) Improved on-time performance;

- c) Reduced ground movement costs;
- d) Optimized use of infrastructure and reduced congestion;
- dd) Reduced ATFM slot wastage;
- e) Flexible pre-departure planning;
- g) Reduced apron and taxiway congestion.

2. The airports with a traffic volume of 100,000 flights per year must develop and establish A-CDM.

3. According to the characteristics, nature and size of airports, composition of agencies and units involved in the collaborative decision-making at airports may be changed, however, the at least the following must be available:

- a) Airport or aerodrome operator;
- b) Aircraft operator;
- c) Air navigation service provider at an airport;
- d) ATFM unit;
- dd) Ground-based commercial service provider.

4. Relevant agencies and units shall share information and implement procedures and process agreed in A-CDM. A-CDM stakeholders shall provide resources and technical infrastructure to adopt methods for sharing information within A-CDM system developed by airport and aerodrome operators. Stakeholders shall take responsibility for their decision-making.

Article 95. Responsibilities of relevant agencies and units

1. The airport or aerodrome operator shall:

- a) establish and implement A-CDM; ensure overall coordination of the A-CDM process during implementation and operations;
- b) cooperate in providing plans related to operations at the airport or aerodrome and information concerning changes to capacity of the airport or aerodrome;
- c) allocate airport or aerodrome infrastructure such as stands, gates, security screening points, check-in locations;

d) submit to the CAAV a report on implementation A-CDM upon request or in case of failure to ensure cooperation or compliance with promulgated laws and A-CDM procedures of relevant organizations and units.

2. The aircraft operator shall:

a) Providing the Flight Plan, flight information, expected and actual turn-around times and any subsequent updates (if any);

b) manage and provide TOBT either themselves or through their authorized service provider;

c) ensure the flight crew is aware of the channels where TOBT and TSAT information can be obtained as it is dependent on local procedures; are aware of start-up and push-back procedures;

d) update changes to flight information in the A-CDM system;

dd) ensure that the authorized ground service provider is responsible for providing relevant information about the aircraft operator upon request.

3. The provider providing air navigation service providers at an airport shall:

a) provide runway-in-use and planned runway-in-use;

b) provide expected runway capacity, and minimum arrival/departure separation;

c) ensure that start-up is issued in accordance with TSAT.

4. The air traffic flow management unit shall:

a) balance Demand and Capacity;

a) cooperate in processing A-CDM data received from the airport or aerodrome operator;

c) provide and update CTOT in the A-CDM system;

d) provide ATFM restrictions.

5. The airport authority shall:

a) inspect and monitor the establishment and implementation of A-CDM;

b) submit to the CAAV a report on inspection and monitoring upon request or in case of failure to ensure cooperation or compliance with promulgated laws and A-CDM procedures of relevant organizations and units.

6. The CAAV shall:

- a) request the airport and aerodrome operators to establish and implement A-CDM at airports as prescribed in this Circular;
 - b) request relevant agencies and units to cooperate with airport and aerodrome operators to establish and implement A-CDM at airports;
 - c) organize inspection and assessment of A-CDM implementation in accordance with the aviation authority's regulations.
7. Relevant units specified in Clause 3 Article 94 of this Circular shall appoint personnel to participate in coordination of operations under A-CDM at airports.

Chapter III

NATURAL DISASTER MANAGEMENT AND AERODROME EMERGENCY AT AIRPORTS AND AERODROMES

Article 96. General regulations

1. Natural disaster management and aerodrome emergency at an airport or aerodrome consist of:
 - a) Natural disaster management;
 - b) Aerodrome emergency activities.
2. Natural disaster management and aerodrome emergency activities in an airport or aerodrome shall be subject to the regulations on natural disaster management and aerodrome emergency specified in this Circular and to ICAO's standards and guidelines.
3. Airport and aerodrome operators shall preside over and cooperate with enterprises operating in the airport or aerodrome in natural disaster management in the airport or aerodrome.
4. Every airport or aerodrome operator shall establish an aerodrome emergency center and define and delegate specific responsibilities to the aerodrome emergency coordination center in each field of natural disaster management and aerodrome emergency at the airport or aerodrome.
5. Airport and aerodrome operators shall maintain the minimum equipment and vehicles for natural disaster management and aerodrome emergency pursuant to the standards in force. Airport and aerodrome operators can mobilize the equipment and vehicles of the enterprises operating in the airport or aerodrome.
6. The CAAV shall guide airport and aerodrome operators and enterprises operating in airports and aerodromes to establish the internal system and personnel for natural disaster management and aerodrome emergency; conduct drills and enter into coordination contracts for natural disaster management and aerodrome emergency rescue in airports and aerodromes.

Article 97. Natural disaster management at airports and aerodromes

1. Operators of airports and aerodromes shall:

- a) promulgate and organize implementation of natural disaster management in airports and aerodromes pursuant to regulations;
- b) formulate and sign the collaboration agreements in natural disaster management with agencies and units in the airports and aerodromes pursuant to regulations;
- c) examine, scrutinize, supplement and maintain the equipment and vehicles for natural disaster management;
- d) examine and maintain the tie-down and aircraft parking system in aprons; examine and reinforce premises, buildings, hangars and towers;
- dd) examine the airport and aerodrome drainage system and the connection of the drainage systems inside and outside airports and aerodromes on regular and periodical basis to prevent water logging and flood in rainy and stormy seasons;
- e) examine the lightning protection systems of buildings, terminals and towers in airports and aerodromes.

2. Enterprises operating in airports and aerodromes shall:

- a) promulgate their specific plans for natural disaster management;
- c) examine, scrutinize, supplement and maintain the natural disaster management equipment systems of their premises, buildings and towers;
- c) cooperate with the operators of airports and aerodromes in natural disaster management and recovery.

3. Airport authorities shall cooperate with airport and aerodrome operators in working with local authorities and relevant agencies and units in maintaining the connection of the drainage systems inside airports and aerodromes and drainage systems of local authorities.

Article 98. Aerodrome emergency activities

1. Aerodrome emergency activities include:

- a) Response to aircrafts involved in accidents outside airports and aerodromes;
- b) Aerodrome emergency response for aircrafts that meet with incidents or accidents at airports and aerodromes;

c) Aerodrome emergency response to fire, explosion, storm-induced collapse, flooding, unlawful interference in airport and aerodrome buildings, hangars and towers, or medical emergency response (including cases in which aircrafts carry passengers from disease-affected areas);

d) Aerodrome emergency activities in extreme environmental conditions, complex or coastal terrains adjacent to aerodromes;

dd) Emergency response to unlawful interference with civil aviation pursuant to regulations on aviation security.

2. Airport and aerodrome operators shall formulate aerodrome emergency plans; form airport and aerodrome emergency forces pursuant to ICAO's regulations; cooperate closely on contract basis with local authorities and relevant agencies and units in regard to aerodrome emergency activities.

3. Providers of aviation services in airports and aerodromes shall be responsible for maintaining sufficient personnel and equipment according to the aerodrome emergency plans of the operators of the airports and aerodromes.

4. An aerodrome emergency plan consists of:

a) General provisions: objectives, regulated entities, scope of responsibility, legal grounds, classification of emergencies and document revision procedure;

b) Execution of emergency activities: aerodrome emergency center, emergency alert station, onsite command committee; establishment of areas, routes and entrances for personnel and vehicles engaged in emergency response;

c) Delegation of responsibilities to units for organizing, collaborating and implementing emergency activities;

d) Communications system for emergency activities;

dd) Personnel, vehicles and equipment for emergency activities;

e) Investigation and recovery: units' responsibilities for investigation and recovery from incidents and accidents;

g) Emergency patrol, training and drill;

h) Reporting;

i) Cooperation with local emergency command committee;

k) Appendices: areas included in the search and rescue range of the airport or aerodrome; sequence of notification upon emergency; sequence of notification and alert upon acts of

unlawful interference; sequence of command upon emergency; sequence of communication, code names and frequencies for emergency activities; phone numbers of individuals and organizations concerning emergency activities; airport and environs grid maps; diagrams of gates, doors and entrances for emergency response personnel and vehicles; emergency simulations.

5. Aerodrome emergency plans are intended for onsite and full-scale emergencies and consist of the following phases:

- a) Information collection and situation analysis;
- b) Alert;
- c) Emergency.

6. Airport and aerodrome operators shall command and manage aviation units to respond initially to aerodrome emergencies and aircraft accidents in their designated areas.

7. Airport and aerodrome operators shall implement airport and aerodrome emergency plans in the following manner:

- a) Deploy emergency and rescue units to be prepared to respond and approach the scene of accident or incident;
- b) Activate the aerodrome emergency center;
- c) Notify relevant collaborative units;
- d) Have medical and ambulance services ready to respond and approach the scene of accident or incident;
- dd) Notify the operator of the aircraft involved in the incident or accident; collect information on hazardous cargo on the aircraft and inform relevant units;
- e) Report to the relevant airport authority; communicate with the air navigation service provider in regard to the shutdown of the relevant airport or aerodrome, define the emergency flight corridor, issue NOTAMs;
- g) Notify the agencies investigating aircraft incidents and accidents as per regulations;
- h) Notify the relevant meteorology center to release special meteorological notice;
- i) Assign individuals to survey and photograph the runways affected to have timely solutions;
- k) Notify the post-mortem examination agency if there are fatalities, and establish a temporary mortuary.

8. Airport emergency drills shall be conducted periodically in each airport or aerodrome on the following scale:

- a) Overall aerodrome emergency drill shall be carried out at least once every 2 years;
- b) An internal aerodrome emergency drill shall be conducted once a year, when an overall drill is not conducted on a periodic basis or when there are shortcomings which are exposed and should be promptly rectified by the airport or aerodrome operator or at the CAAV's request.

Chapter IV

IMPLEMENTATION CLAUSE

Article 99. Transitional clauses

Any employee's license to operate aviation equipment or vehicles in restricted areas of an airport or aerodrome which was issued before the effective date of this Circular shall remain valid until its expiry.

Article 100. Effect

1. This Circular comes into force from January 15, 2022.
2. The Circular No. 17/2016/TT-BGTVT dated June 30, 2016 of the Minister of Transport and Circular No. 30/2020/TT-BGTVT dated November 18, 2020 are repealed.
3. Any of the legislative documents and documents of ICAO referred to in this Circular is amended or replaced, the newest one shall prevail.
4. Clause 1 Article 34 of this Circular shall apply within 12 months after the effective date of this Circular.
5. Clause 1 Article 85 of this Circular shall apply from March 26, 2023 to start determining historic slots for the 2024 summer season and next seasons.
6. Form No. 4.2 in the Appendix I of this Circular shall apply within 36 months after the effective date of this Circular.

Article 101. Implementation

The Chief of the Ministry Office, the Chief Inspector of the Ministry, Directors General, the Director General of the Civil Aviation Authority of Vietnam, heads of agencies, organizations and individuals concerned are responsible for the implementation of this Circular.

**PP. THE MINISTER
THE DEPUTY MINISTER**

Le Anh Tuan

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