

Acceptable Means of Compliance and Guidance Material to Annex II (Part-GH.OPS) to Commission Delegated Regulation (EU) 2025/20

Issue 1

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AMC AND GM TO ANNEX II (PART-GH.OPS) TO COMMISSION DELEGATED REGULATION (EU) 2025/20

AMC1 GH.OPS.010 Interfaces with other organisations

PROCEDURES

- (a) The GH organisation should ensure that its operational procedures identify and address its interfaces with the other organisations.
- (b) The GH organisation should contribute with its own SMS and safety data to the actions initiated by the aerodrome operator to create a mitigation plan for integrated risks coming from all users of that aerodrome.
- (c) The GH organisation should apply the following steps in the identification of interfaces and to develop the necessary actions:
 - (1) identify in which of the processes and procedure there are interfaces;
 - (2) determine whether they are internal or external interfaces;
 - (3) consider the critical nature of each interface and whether there are any hazards related to the interfaces;
 - (4) determine whether data sharing is required;
 - (5) carry out joint hazard analysis and safety risk assessment with the aerodrome operator or the aircraft operator, or both, as required.

GM1 GH.OPS.010 Interfaces with other organisations

COMMUNICATION, COOPERATION AND COORDINATION BETWEEN AIRCRAFT OPERATORS, AERODROME OPERATORS AND GH ORGANISATIONS

The relevant content of ICAO Doc 10121, *Manual on Ground Handling*, and other industry good practices may be used to identify and address the operational interfaces with adequate safety mitigation measures.

- (a) Communication, cooperation and coordination among GH organisations, aircraft operators and aerodrome operators are key elements in ensuring the regularity, efficiency and safety of operations. The GH organisation should share experiences and participate in:
 - (1) ground operations groups;
 - (2) aerodrome safety committees;
 - (3) national safety forums; and
 - (4) GH organisation networks.

- (b) To ensure safe and efficient aircraft operations, it is essential that the GH organisation actively participates in airport collaborative decision-making (A-CDM), total airport management and any other project where the opportunity to exchange relevant safety information is provided, as relevant to local requirements and aerodrome operators' requirements.
- (c) Safety risk management. Hazard identification and risk assessment start with the identification of all stakeholders involved in the GH activities, including independent experts and non-approved organisations. They extend to the overall control structure, assessing, in particular, the following elements across all subcontract levels and all parties within such arrangements:
 - (1) clear assignment of accountability and allocation of responsibilities;
 - (2) only one party is responsible for a specific aspect of the arrangement ensuring no overlapping or conflicting responsibilities;
 - (3) applicable procedures;
 - (4) communication between all parties involved, including reporting and feedback channels;
 - (5) existence of clear lines of reporting, both for occurrence reporting and progress reporting;
 - (6) qualifications and competencies of key personnel;
 - (7) possibility for GH personnel to directly notify the aircraft operator or aerodrome operator of any hazard whose consequences would result in an obviously unacceptable safety risk.
- (d) Guidance on establishing operational interfaces can be found in ICAO Doc 10121, *Manual on Ground Handling*.

GM2 GH.OPS.010 Interfaces with other organisations

SAFETY-CRITICAL GH FUNCTIONS

The following GH functions are considered to be safety critical; the list is not exhaustive, as the GH organisation may include functions other than the ones below:

- (a) loading supervision;
- (b) aircraft loading/unloading;
- (c) operation of GSE including passenger stairs, PBBs, airbridges and cargo loaders;
- (d) aircraft towing and pushback;
- (e) aircraft arrival and departure activities;
- (f) turnaround coordination;
- (g) fuelling operations;
- (h) de-icing/anti-icing operations;
- (i) functions that require the handling of dangerous goods on the apron, in the cargo warehouse, during aircraft loading or for load planning.

GM3 GH.OPS.010 Interfaces with other organisations

RESPONSIBILITIES OF INDIVIDUAL STAKEHOLDERS INVOLVED IN THE SAME GH ACTIVITIES

- (a) It is recommended that if the operating procedures developed and implemented by the GH organisation for a particular GH service conflict with the procedures developed by the aerodrome operator or the aircraft operator, the GH organisation discuss those procedures with the other organisation and, if necessary, perform a safety risk assessment, which should ultimately lead to a commonly agreed version of the procedures to be applied to that specific GH service.
- (b) The purpose of having the organisations concerned address together any conflicting procedures is to ensure the safest and most efficient way of applying those procedures, by harmonising them as much as possible for each aircraft type/family, and minimising the number of deviations from the applicable standards and good practices.
- (c) Examples of procedures to which this may apply are procedures for aircraft handling in adverse weather conditions, passenger boarding or disembarkation using pedestrian walkways, or aircraft refuelling operations, which involve the aerodrome operator, the aircraft operator, and the GH organisation providing refuelling services.

GM4 GH.OPS.010 Interfaces with other organisations

INTERFACES BETWEEN GH ORGANISATIONS, AIRCRAFT OPERATORS AND AERODROME OPERATORS

The following GH activities have been identified as requiring operational interfaces between the GH organisation, the aircraft operator and the aerodrome operator.

Activity	GH organisation	Aerodrome operator	Aircraft operator
Walking and working airside	1. Ensure that training is in place and compliance by its personnel with the general safety policies and procedures of the aerodrome and aircraft operators. 2. Assess local risks and job tasks to identify any additional personal protective equipment (PPE) required, such as high-visibility clothing, safety shoes or boots, clothing appropriate for the weather, gloves, face protection or safety goggles. 3. Observe national regulations on health and safety.	1. Set out the overall design and operation of the airside areas. 2. Set out and ensure the application of general safety policies and procedures such as access to airside, apron discipline and use of PPE.	1. Set out and ensure the application of general safety rules on aircraft turnaround, such as driving in the vicinity of, walking around and approaching the aircraft. 2. Have a procedure for ensuring aircraft turnaround safety.

Activity	GH organisation	Aerodrome operator	Aircraft operator
Vehicle and equipment operation	1. Ensure that personnel are trained and competent in operating the vehicles and equipment, in accordance with the manufacturers and aircraft operators' and aerodrome operators' requirements. 2. Ensure that the organisation's vehicles and personnel comply with the aerodrome's driving rules. 3. Use a guide person when positioning equipment when operational procedures require this. 4. Ensure that the vehicles are operated and maintained in accordance with aircraft manufacturers' specifications, where these are provided. 5. Ensure that vehicle/equipment maintenance schedules are followed and that serviceability checks are conducted.	1. Develop rules for the operation of vehicles on the apron, including a formal driver training, assessment and licensing scheme for all drivers operating in the movement area. 2. Develop an agreed set of minimum standards for the condition and maintenance of airside vehicles, aligned with Commission Delegated Regulation (EU) 2025/20. 3. May perform regular vehicle checks. 4. Issue an airside vehicle permit for any vehicle operating airside.	—
FOD	1. Participate in the aerodrome operator's and aircraft operators' FOD management programmes and encourage all personnel to adhere to them. 2. Supervisors should constantly be aware of the potential for FOD and be knowledgeable of their area of responsibility and ensure that personnel are aware of and participate in FOD prevention programme efforts. 3. Personnel should be made aware of the hazards of FOD to aircraft and individuals. To measure programme effectiveness, incidents caused by FOD should be reported.	Develop a comprehensive FOD management programme, including detection, prevention and evaluation of FOD at the airport.	Provide awareness training for personnel on the hazards of FOD to aircraft and individuals.

Activity	GH organisation	Aerodrome operator	Aircraft operator
Equipment approaching the aircraft	1. Ensure that personnel are trained according to the operational procedures and instructions provided by the aircraft operators. 2. Ensure that GSE servicing the aircraft is serviceable. 3. Ensure that the GSE does not make contact with the aircraft fuselage. 4. Ensure that, when positioning GSE, adequate clearance is maintained between all GSE and the aircraft to allow vertical movement of the fuselage during the entire GH process. 5. Ensure that each GSE is positioned/parked so as not to hamper other GH activity, especially escape routes of fuel trucks. 6. GSE that interfaces with the aircraft passenger doors should have platforms of sufficient width to allow the aircraft doors to be opened/closed with the equipment in place and the safety rails deployed. 7. When positioning equipment (GSE), use a guide person as per the operational procedures in the GH manual. Ensure that the guide person, when used, is in a position where they can accurately judge clearances and communicate signals to the driver/operator. Stop immediately when visual contact with the guide person is lost. 8. A guide person is not required if the equipment is fitted with systems (e.g. sensors) that enable the operator to accurately judge clearances and properly move the		Define the rules to be followed for all equipment approaching the aircraft, including with regard to speed, brake checks, situations where a guide person is needed, clearance from the fuselage and equipment chocking.

Activity	GH organisation	Aerodrome operator	Aircraft operator
	equipment to and from the aircraft.		
General safety during aircraft fuelling operations	1. Ensure that personnel are aware of and take precautions during fuelling operations, regarding the use of portable electronic devices and sources of ignition, and the connection of electrical equipment to the aircraft (e.g. by observing the safety zones and parking restrictions and following emergency procedures in response to fuel spillage. 2. Provide specific training to personnel on safety measures applicable during fuelling with passengers on board. 3. Verify the application of safety measures, in particular the provision of clear areas for the deployment of evacuation slides. 4. Apply the aerodrome's procedure for safety on the apron during fuelling operations as per Regulation (EU) No 139/2014.	Ensure that all personnel working in apron areas are aware of the safety requirements of Regulation (EU) No 139/2014 on safety on the apron during aircraft fuelling and defuelling operations.	1. Develop policies and procedures for basic safety during fuelling, including precautions for fuelling with passengers on board. 2. Determine aircraft emergency exits 3. Clarify permission to board or disembark passengers, including PRMs, during refuelling 4. Ensure that the operator's procedures do not contradict the aerodrome's procedures for the safety of apron operations during fuelling.
Adverse weather conditions	Ensure that the personnel are aware of hazards and precautions to take during adverse weather conditions and that notice of these conditions is communicated to front-line personnel in an effective and timely manner.	1. Establish procedures to ensure the safety of aerodrome operations in adverse weather conditions and ensure that GH organisations follow them. 2. Ensure that relevant information on adverse weather conditions is provided to aerodrome users in a timely manner, as well as any applicable restrictions to	1. Develop policies and procedures for the GH of aircraft during adverse weather conditions.

Activity	GH organisation	Aerodrome operator	Aircraft operator
		operations, such as low visibility.	
General awareness of dangerous goods	1. Ensure that the personnel are qualified to identify, handle and load dangerous goods as required by their operational responsibilities. 2. Have procedures to ensure that incidents and accidents involving dangerous goods are reported as required.	Have procedures in place to respond to incidents involving dangerous goods.	Develop policies and procedures for the carriage of dangerous goods on aircraft.
Turnaround coordination	1. Ensure turnaround coordination and apply the aircraft operator's turnaround plan. 2. A turnaround coordination function should facilitate adherence to the plan.		Aircraft operators should provide the GH organisation with a turnaround plan.
Load planning	Execute load planning in accordance with the aircraft operator's procedures and instructions, when this service is outsourced.		1. Develop procedures in accordance with the air operations requirements to include mass and balance calculations, load planning, production of a load instruction/report, finalisation of a load sheet, last-minute changes and special load NOTOC, as applicable. 2. Ensure that any verbally received load information, which could affect aircraft mass and balance, is documented and communicated to the person responsible for final calculation of mass and balance prior to each flight. 3. Provide instructions for aircraft loading

Activity	GH organisation	Aerodrome operator	Aircraft operator
			and unloading for each aircraft type.
Aircraft arrival	1. Position the personnel performing the turnaround away from hazard zones. 2. GSE required for aircraft handling should be available, serviceable and positioned well clear of the aircraft path, normally outside the equipment restraint area. 3. Personnel in charge of arrival should conduct a FOD check on the stand prior to aircraft arrival. 4. Ensure that the emergency procedures are understood and the equipment and infrastructure to be used is serviceable. 5. If the GH organisation provides a marshalling service, it should be performed in accordance with the aerodrome operator's procedures. 6. Standard hand signals and agreed phraseology (if applicable) should be used for all communication between flight crew and ground personnel in accordance with Part-SERA. 7. Marshallers and wing walkers should be distinguishable to the flight crew and utilise during daytime operations either wands or mitts of a highly visible colour and during low-visibility conditions / night-time operations lighted wands. 8. Ensure that personnel understand the use of aircraft anti-collision lights. When an aircraft has an unserviceable auxiliary power unit (APU), specific procedures should be followed to connect the ground power prior to anti-	1. Ensure that the allocated stand is serviceable and suitable for the aircraft characteristics. 2. Communicate to the GH organisation the initially allocated stand and any changes in a timely manner. 3. When aircraft marshalling is performed by an apron management service provider or aerodrome operator, establish clear procedures for handover of parked aircraft to the GH organisation for the necessary GH services.	1. Ensure that the phraseology, signals and procedures regarding communication between GH organisation personnel and flight deck for arrival are established (for marshalling, pushback and towing in accordance with Part-SERA), practised and used by flight crew when communicating with GH personnel and vice versa. 2. Ensure that procedures for aircraft ground movement are established, including actions before arrival, standard arrival procedure, use of GSE, danger areas and backup communications.

Activity	GH organisation	Aerodrome operator	Aircraft operator
	collision lights being switched off. 9. Ensure that the required number of serviceable chocks are available for the aircraft to be chocked. The aircraft should not be approached to position the nose-wheel chocks until it has come to a complete stop. Personnel should notify the flight deck crew when the chocks have been inserted.		
PBBs and passenger stairs	Ensure that personnel operating a PBB or passenger stairs are trained and competent to do so and familiar with the safety features of the equipment they are operating.	1. Make available training standards and procedures for the use of each type of PBB operated at the airport. 2. Ensure that any third-party operating a PBB is trained to do so in accordance with the established training programme.	Develop policies and procedures for the use of PBBs and stairs on the operator's aircraft, including operation of doors and communication with the cabin crew.
Ground power and pre-conditioned air units	Ensure that personnel operating mobile or fixed ground power and pre-conditioned air units are qualified and familiar with the features of the equipment they are operating.	1. Make available training material and procedures for the use of fixed ground power and pre-conditioned air units. 2. Ensure that fixed ground power and pre-conditioned air units are serviceable and adapted to the aircraft's requirements. 3. Ensure that any equipment that is inoperable is removed from service immediately and	Develop policies and procedures for the use of ground power and pre-conditioned air on the operator's aircraft, including sequencing and communication with the flight and cabin crew.

Activity	GH organisation	Aerodrome operator	Aircraft operator
		that users are notified.	
Loading and unloading	Ensure that personnel assigned to perform loading and unloading functions are properly trained and qualified. Training includes manual handling, understanding of loading instruction forms and loading reports, reporting of the final load (including deviations), last-minute changes, ULD serviceability, aircraft hold inspection, tipping tendency.	Ensure that ULDs can be stored in a safe and convenient place within the airport area.	Develop policies and procedures for the loading and unloading of the aircraft, which may include the operation of cargo doors, load classifications and priorities, sequencing, load securing, special precautions for fire detection systems in the aircraft hold and special loads such as live animals, dangerous goods, urgently required aircraft parts and other aircraft operator materials.
Elevating equipment (for cargo and catering loading/unloading)	Ensure that personnel operating elevating equipment are qualified to do so and familiar with the features of the equipment they are operating.		Develop policies and procedures regarding proximity restrictions; door operation; the use of elevating equipment on the aircraft; the use of chocks/stabilisers.
Toilet and potable water servicing	Ensure that personnel performing toilet and potable water servicing are qualified to do so and familiar with the features of the equipment they are operating.	1. Provide facilities to uplift potable water and dispose of aircraft toilet waste. 2. Coordinate with the GH organisation to ensure that adequate procedures are in place to manage any spillages during toilet servicing in accordance with local health, safety and environmental regulations.	Develop policies and procedures for toilet and water servicing, including liquid quantities required for specific aircraft potable water and toilet configurations.
Air start units	Ensure that personnel performing air start procedures are trained and qualified to do so and familiar	In the case of air start engine start-up on the stand, establish special	Establish policies and procedures for the use

Activity	GH organisation	Aerodrome operator	Aircraft operator
	with the features of the equipment they are operating. Training includes precautions that should be taken to ensure correct and safe connection to the aircraft and operator communication with the flight crew and other team members.	precautions regarding jet blast.	of an air start unit on the aircraft.
Aircraft departure	1. Ensure protection against jet blast and engine ingestion effects. 2. Ensure that personnel performing aircraft departure procedures are trained and qualified for the method being utilised (pushback, taxi-out or power back) and familiar with the features of any equipment they are operating. Training includes: a. aircraft pre-departure inspection; b. pre-departure stand checking, including FOD inspection; c. use and removal of aircraft steering bypass pin; d. maximum gear turn limits; e. airport infrastructure limitations.	1. Ensure protection against jet blast and engine ingestion effects are in place, where applicable. 2. In coordination with air navigation services and apron management services, consider the development of standard pushback procedures for the movement of aircraft on aprons and taxiways.	1. Develop policies and procedures for the safe departure of the operator's aircraft from the stand. 2. Ensure that phraseology, signals and procedures for communication between ground and flight deck related to departure are established, practised and used by flight crew when communicating with ground crew and vice versa.
Aircraft towing/pushback	1. Ensure that personnel performing towing/pushback procedures are qualified to do so and are familiar with the features of any equipment they are operating. 2. Ensure proper linking with the apron management service provider. Ensure compliance with the applicable SERA requirements. 3. Ensure that personnel are aware of aerodrome/air traffic control rules for the specific routes being used.	1. Consider developing standard aircraft towing routes and procedures in coordination with air navigation services and apron management services. 2. Ensure the use of anti-collision lights and communication with air traffic control for movements on	Develop policies and procedures for towing of aircraft, including: 1. type of towing equipment suitable for aircraft type; 2. connection and disconnection of equipment to and from the aircraft; 3. communication between the ground and the flight deck; 4. use of anti-collision lights (as

Activity	GH organisation	Aerodrome operator	Aircraft operator
		aprons and taxiways.	per Part-SERA) and emergency procedures.
Aircraft de-icing and anti-icing	1. Ensure that personnel performing aircraft de-icing and anti-icing procedures are qualified to do so and are familiar with the procedures applicable to fluids or forced air operations and any equipment they are operating. 2. When responsible for the storage or handling of de-icing and anti-icing fluids, ensure that pre-season, receipt, truck-filling and other required quality assurance checks are performed and that fluid meets the required specifications prior to being used in operations. 3. Receive and apply instructions from the aircraft operator about who will conduct the post de-icing check. 4. Ensure that when storing or handling de-icing/anti-icing fluid, pre-season, receipt and other required quality assurance checks are performed.	1. Define the location and facilities used for aircraft de-icing and anti-icing at the airport. 2. Develop or ensure that procedures are in place for the collection and safe disposal of de-icing and anti-icing fluids.	1. Develop policies and procedures for de-icing and anti-icing, including methods, types of fluids to be used, restrictions on the application of the fluids, communication between flight crew and de-icing personnel, and reference to holdover time. 2. Agree and notify GH organisation about who will conduct the post de-icing check. 3. Ultimate responsibility for the aircraft remains with the commander/pilot-in-command, as per Regulation (EU) No 965/2012.

AMC1 GH.OPS.030 Common language

LANGUAGE OF COMMUNICATION IN DAILY OPERATIONS

GH operational personnel should be able to communicate effectively among themselves, and with the aerodrome operator personnel and the flight crew, depending on their assigned function. Their level of knowledge of the language used should enable individuals to perform their daily tasks as established through the GH organisation's GH manual and the relevant safety procedures.

GM1 GH.OPS.030 Common language

OPERATIONAL USE OF COMMON LANGUAGE

- (a) GH operational personnel is expected to be able to communicate effectively in a job-related context, to handle normal, abnormal and emergency situations and conduct non-routine

coordination with colleagues and other operational personnel of the aerodrome or flight crews, regardless of the language used.

- (b) GH personnel whose daily operational tasks include communication with flight crews are expected to be able to communicate effectively in English on operational matters related to their function. Derogations approved or issued by the competent authority in accordance with Regulation (EU) No 139/2014 remain valid and prevail over this GM.
- (c) The following GH functions are subject to point (b) (this list is for guidance purposes, and the GH organisation may decide to consider other GH functions as well; in addition, the aerodrome operator's instructions on the language to be used will be complied with):
 - (1) aircraft towing and pushback,
 - (2) fuelling operations,
 - (3) aircraft de-icing/anti-icing operations,
 - (4) turnaround coordination,
 - (5) loading supervision.
- (d) A person's ability to communicate effectively in an operational context could be demonstrated as follows:
 - (1) ability to communicate on common and work-related topics with accuracy and clarity;
 - (2) ability to use appropriate communication methods to exchange messages and to recognise and resolve misunderstandings in a general or work-related context;
 - (3) ability to linguistically handle a complication that may occur during a routine work situation or a communication task with which they are otherwise familiar.

SUBPART 1 — PASSENGER HANDLING

AMC1 GH.OPS.100 Passenger handling — general requirements

SAFETY RISK MITIGATION MEASURES FOR CHANGES IN THE AIRCRAFT'S CENTRE OF GRAVITY DURING PASSENGER BOARDING OR DISEMBARKATION

Changes in the aircraft's centre of gravity during boarding/disembarkation may lead to the aircraft's nose lifting up, causing issues and potential injuries to passengers/aircrew, damage to the GSE docked to the aircraft or aircraft tail tipping.

- (a) The operational procedure for passenger boarding and disembarkation should cover the following key risk areas, as a minimum:
 - (1) aircraft damage by the GSE docked to the aircraft (PBBs, passenger stairs);
 - (2) aircraft tail tipping;
 - (3) movement of the aircraft's centre of gravity too far aft;
 - (4) passengers and aircrew getting injured due to aircraft pitch angle changes;
 - (5) damage to the GSE docked to the aircraft.
- (b) The operational procedure for passenger boarding and disembarkation should consider synchronising cargo loading/unloading with passenger boarding/disembarkation to maintain a forward centre of gravity.
- (c) The turnaround coordinator, the person monitoring passenger boarding and disembarkation, and the aircraft loading personnel should be trained to recognise early signs of the aircraft's centre of gravity moving too far aft and take the required corrective actions.

AMC2 GH.OPS.100 Passenger handling — general requirements

PASSENGER HANDLING — PASSENGERS WITH REDUCED MOBILITY

- (a) The safety training and safety operational procedures for PRM services, including the transportation of their mobility devices, should address the following key risk areas:
 - (1) communication of safety-relevant information:
 - (i) relevant information from the aircraft operator to the aerodrome operator or the different organisations involved in the handling of PRMs and preparation of their mobility aids for air transport;
 - (ii) information about the type of battery in the mobility device and instructions for battery disconnection or removal;
 - (iii) correct information to the commander/pilot-in-command;
 - (2) boarding/disembarking of PRMs to prevent injuries to persons and damage to the aircraft, mobility devices and GSE:

- (i) use of adequate GSE (ambulift, medilift) for boarding and disembarkation;
 - (ii) correct operation of the GSE for boarding and disembarkation of PRMs;
 - (iii) prevention of obstruction of the PBB during boarding/disembarkation because of massed carry-on baggage and queueing mobility devices;
 - (3) preparation of the mobility device for safe transport:
 - (i) dangerous goods training;
 - (ii) packaging and loading of the mobility device in compliance with ICAO's Technical Instructions and to protect the battery in the mobility device during flight;
 - (4) compliance with the aircraft operator's instructions on mass and balance regarding loading and securing mobility devices in the cargo compartment:
 - (i) applicable aircraft loading limitations;
 - (ii) applicable load-spreading instructions;
 - (5) adequate planning reflected in the turnaround coordination activities;
 - (6) compliance with the aerodrome operator's instructions and the aircraft operator's instructions when refuelling/defuelling with PRMs on board, boarding or disembarking, as well as during ground transport of PRMs between the airport terminal and the aircraft;
 - (7) compliance with the aerodrome operator's instructions in accordance with Regulation (EC) No 1107/2006.
- (b) Each organisation involved in the handling of PRMs and their mobility devices should take responsibility for the above-mentioned activities when they are performed by their own personnel.

GM1 GH.OPS.100 Passenger handling — general requirements

PASSENGERS WITH REDUCED MOBILITY

- (a) The responsibility to ensure the provision of assistance to PRMs or passengers with disabilities at an aerodrome remains with the aerodrome operator, in accordance with Regulation (EC) No 1107/2006. That Regulation also specifies the possibility that assistance services are provided by the aerodrome operator or contracted to another provider.
- (b) Likewise, the responsibility for adequate training of personnel remains with the aerodrome operator, as specified by Regulation (EC) No 1107/2006.

- (c) Additional guidelines may be found in the European Civil Aviation Conference's Code of good conduct in ground handling for persons with reduced mobility² and its *Policy statement in the field of civil aviation facilitation*³ (Doc 30, Part I, Section 5).

GM1 GH.OPS.100(a) Passenger handling — general requirements

GROUND TRANSPORT OF PASSENGERS

To demonstrate compliance with Commission Delegated Regulation (EU) 2025/20 when providing services related to ground transport of passengers, the GH organisation is expected to prove compliance with the following:

- (a) inclusion of this activity in its SMS in accordance with point ORGH.MGM.200;
- (b) implementation of the applicable requirements of Subpart ORGH.GSE;
- (c) compliance with the applicable requirements of Regulation (EU) No 139/2014 regarding the authorisation of vehicle drivers and their training, authorisation of vehicles, operation of vehicles, and marking and lighting of vehicles.

AMC1 GH.OPS.100(b) Passenger handling — general requirements

SAFETY RISK MITIGATION MEASURES FOR PASSENGERS ON THE APRON DURING BOARDING AND DISEMBARKATION

The walkways process should not be conducted:

- (a) when the aircraft is being refuelled simultaneously with passenger boarding in the adjacent stand of the passenger boarding side;
- (b) adverse weather conditions (thunderstorms, lightning, snow/ice, strong winds, heavy rain, fog, etc.) are anticipated or prevailing over the airport (the aerodrome procedures also apply for these conditions);
- (c) an emergency situation is in progress.

GM1 GH.OPS.100(b) Passenger handling — general requirements

MITIGATION MEASURES TO ENSURE SAFETY OF PASSENGERS ON THE APRON DURING BOARDING AND DISEMBARKATION

The GH organisation may apply mitigation measures such as:

- (a) assignment of an adequate number of GH personnel to monitor passenger movement on the apron;

² European Civil Aviation Conference, *Code of good conduct in ground handling for persons with reduced mobility*, 2003, https://www.ecac-ceac.org/images/documents/ECAC_Code_of_Conduct_Ground_Handling_for_Persons_with_Reduced_Mobility_2003.pdf.

³ ECAC.CEAC DOC 30, Part I, *ECAC Policy Statement In The Field Of Civil Aviation Facilitation*, 2023, 13th edition, https://www.ecac-ceac.org/images/activities/facilitation/ECAC-Doc_30_Part_I_Facilitation_13th_edition_13_Dec_2023.pdf

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- (b) use of markings and a walking path for pedestrians.

SUBPART 2 — BAGGAGE HANDLING

[placeholder]

SUBPART 3 — AIRCRAFT SERVICING

AMC1 GH.OPS.300(b)(3) Safety on the apron

SAFETY RISK MITIGATION MEASURES FOR PERSONNEL MOVING AROUND THE AIRCRAFT DURING TURNAROUND

When the aircraft engines are running or the aircraft is about to move and the anti-collision light is on:

- (a) the operational procedures and safety training should cover the safety risks of the following activities:
 - (1) chocking of aircraft;
 - (2) provision of ground power unit when the aircraft's auxiliary power unit is inoperative;
 - (3) other circumstances explicitly described in the GH organisation's GH manual;
- (b) the operational procedures should provide mitigation measures for the following safety risk areas as a minimum:
 - (1) inoperative beacon or beacon not turned on — proper communication between cockpit and ground or an alternative procedure should be ensured;
 - (2) use of beacon lights by the flight crew other than for the intended purpose when the startup clearance is given by air traffic control but the GH operations tasks have not been completed;
 - (3) poor communication between the flight crew and the GH persons before the aircraft doors open/close;
 - (4) insufficient chocking or poor communication leading to aircraft rolling unintentionally;
 - (5) lack of signal for 'aircraft under movement', as the beacon is only intended for 'engine running', posing risk during pushback/towing operations — an additional signal for 'aircraft under movement' should be established and communicated to the personnel involved;
 - (6) lack of coordination between GSE operators/drivers during aircraft turnaround (fuelling, catering, PRM handling, etc.);
 - (7) securing of GSE.

AMC1 GH.OPS.305 General requirements for the operation of ground support equipment

SAFETY RISK MITIGATION MEASURES FOR THE OPERATION OF PASSENGER BOARDING BRIDGES

- (a) The operation of PBBs, if done incorrectly, may lead to collisions between aircraft and PBBs or injuries to personnel or passengers.
- (b) The operational procedures and training should mitigate the safety risks arising from the following situations (the list is not exhaustive):

- (1) operating new or different models of PBBs, with possible differences in the control panel;
- (2) operating PBBs with many different instructions provided by various aircraft operators (various gap requirements and touch/no-touch policies);
- (3) operating multiple PBBs for the same aircraft.
- (c) Training of personnel operating the PBBs should include identification of malfunctions and recognition of sensors indicating issues with their serviceability.
- (d) PBBs should be parked in the designated areas and secured on the ground against unintended movement.
- (e) At aerodromes where the aerodrome operator provides the procedures for PBB operation, the GH organisation operating PBBs should comply with those procedures.

AMC2 GH.OPS.305 General requirements for the operation of ground support equipment

USE OF A GUIDE PERSON

- (a) A guide person should be used when positioning the GSE against the aircraft where the view of the driver is or may be obstructed.
- (b) The procedure for the operation of GSE when using a guide person should ensure the following aspects, as a minimum:
 - (1) the guide person is in a position to accurately judge clearances and communicate signals to the driver/operator;
 - (2) operation is stopped immediately when visual contact with the guide person is lost.
- (c) The GH organisation should apply mitigation measures to ensure the safety of the guide person.
- (d) A guide person is not necessary if the GSE is equipped with systems (e.g. sensors) that enable the operator to accurately judge clearances and properly move it to and from the aircraft.

AMC3 GH.OPS.305 General requirements for the operation of ground support equipment

SAFETY RISK MITIGATION MEASURES FOR THE OPERATION OF GSE

- (a) Correct operation of motorised/non-motorised GSE following effective training and the correct use of effective procedures and processes should include the movement of equipment around the aircraft, as well as the selection of appropriate equipment for the GH service or task.
- (b) The procedures and training for the operation of GSE should cover the following, as a minimum:
 - (1) the specific risks on the aerodrome apron and the differences between the risks of driving on the aerodrome movement area compared with driving in 'normal traffic';

- (2) specialised GSE and heavy GSE and their specific behaviour and risks in the proximity of aircraft;
- (3) application of procedures regarding driving speed, GSE guidance, brake tests and the no-touch policy;
- (4) adequate coordination of GH services using GSE during aircraft turnaround to prevent the GSE's collision with the aircraft or with other GSE, considering the aerodrome's operational context;
- (5) positioning and/or securing of GSE to prevent it from being moved inadvertently during adverse weather conditions;
- (6) proper visibility of GSE and adequate lighting and marking of the GSE in any conditions, in compliance with the procedures of the aerodrome operator;
- (7) compliance with the aerodrome operator's instructions and procedures regarding driving and air traffic control clearances.

GM1 GH.OPS.305 General requirements for the operation of ground support equipment

SAFETY RISK MITIGATION MEASURES FOR OPERATING GSE IN ADVERSE WEATHER CONDITIONS

The aerodrome's procedures for operation in adverse weather conditions will be applied. However, this should not discourage the GH organisation from including additional safety risk mitigation measures, when necessary and as applicable to the operational context. Such mitigation measures include, for example:

- (a) ensuring that the lights on the GSE are visible and functional;
- (b) performing adequate GSE maintenance during winter or significantly hot or humid weather;
- (c) implementing increased securing and enhanced positioning measures for GSE;
- (d) conducting refresher training for GH personnel.

AMC1 GH.OPS.305(b) General requirements for the operation of ground support equipment

AERODROME MOVEMENT AREA CHART

The GH organisation should ensure an up-to-date copy of the movement area chart of a sufficient size, including hotspots, is readily available in the driver's cabin of each vehicle used for GH operations on the movement area.

GM1 GH.OPS.305(d) General requirements for the operation of ground support equipment

NO-TOUCH POLICY

This policy refers to the minimum distance to which the GSE can approach the aircraft to ensure full operational functions without touching the aircraft, in order to avoid causing any damage to the fuselage.

AMC1 GH.OPS.310 Aircraft refuelling and defuelling

INTERFACES WITH THE AIRCRAFT OPERATOR AND THE AERODROME OPERATOR

- (a) When several GH organisations perform different aircraft handling services, including fuelling and defuelling performed by an into-plane fuelling agent, the GH organisations should have and apply common procedures to ensure that the following risks are properly mitigated:
 - (1) ignition of fire;
 - (2) injuries to persons or damage to the aircraft, vehicles or buildings;
 - (3) fuel spillage;
 - (4) damage to the environment by contamination or fire;
 - (5) loading of the wrong fuel quantity;
 - (6) refuelling of the aircraft with the wrong fuel type and/or grade or with contaminated or deteriorated fuel;
 - (7) access of passengers or unauthorised persons into the refuelling area;
 - (8) aircraft refuelling in the vicinity of electromagnetic fields.
- (b) The procedures should also address the interaction and communication between the provider of the into-plane fuelling, the GH organisation ensuring aircraft turnaround and the aircrew. The purpose is to ensure safety of operations during turnaround and the smooth coordination of actions and evacuation in the event of an emergency, while maintaining compliance with the aerodrome operator's and aircraft operator's procedures for aircraft refuelling.
- (c) The person performing the refuelling/defuelling with passengers on board, boarding or disembarking should notify the qualified person on board the aircraft (as established by the aircraft operator in its procedure) and those performing the turnaround coordination function of the GH organisations responsible for the other aircraft ground servicing activities when refuelling is about to begin and when it has been completed.
- (d) The GH organisation should ensure that fire extinguishers are readily available at least for initial intervention in the event of a fuel fire, and that the personnel are trained in their use.

AMC2 GH.OPS.310 Aircraft refuelling and defuelling

INTERFACES WITH THE AIRCRAFT OPERATOR AND THE AERODROME OPERATOR

The GH organisation should ensure that its specific responsibilities for refuelling and defuelling operations are aligned with the following procedures, which establish the responsibilities of the other stakeholders involved in these activities as follows:

- (a) In accordance with Regulation (EU) No 965/2012, the aircraft operator is responsible for providing the GH organisation with fuelling instructions and procedures, including:
 - (1) safety precautions to be taken during refuelling and defuelling, including when an aircraft's auxiliary power unit is in operation or, for helicopters, when rotors are turning or, for aeroplanes, when an engine is running;
 - (2) procedures for refuelling and defuelling while passengers are embarking, on board or disembarking; and
 - (3) precautions to be taken to avoid:
 - (i) refuelling with the wrong type, or the wrong quantity, of fuel, or
 - (ii) persons not following the established procedures for refuelling.
- (b) In accordance with Regulation (EU) No 139/2014, the aerodrome operator is also responsible for establishing a procedure related to the safety of operations on the apron during refuelling/defuelling and ensuring that the other organisations involved follow that procedure.

GM1 GH.OPS.310 Aircraft refuelling and defuelling

RECOMMENDED GUIDANCE FOR REFUELLING AND DEFUELLING

The following documents and industry standards and good practices may be used:

- (a) ICAO Doc 9977, *Manual on Civil Aviation Jet Fuel Supply*;
- (b) the standards and instructions put forward under the JIG in relation to the aviation fuel supply standards:
 - (1) JIG 1 – *Aviation Fuel Quality Control and Operating Standards for Into-Plane Fuelling Services*,
 - (2) JIG 2 – *Aviation Fuel Quality Control and Operating Standards for Airport Depots and Hydrants*,
 - (3) JIG 4 – *Aviation Fuel Quality Control and Operating Standards for Smaller Airports*,
 - (4) EI/JIG 1530 – *Quality Assurance Requirements for the Manufacture, Storage & Distribution of Aviation Fuels to Airports*, and EI 1533 – *Quality assurance requirements for semi-synthetic jet fuel and synthetic blending components (SBC)*;
- (c) the refuelling organisation's own procedures;
- (d) the procedures of the aircraft operator.

AMC1 GH.OPS.310(b) Aircraft refuelling and defuelling

RESPONSIBILITIES OF PERSONNEL

- (a) The into-plane fuelling personnel are responsible for ensuring that:
 - (1) on-specification fuel of the correct grade is always delivered to the aircraft; and
 - (2) the operations are carried out in a safe manner.
- (b) The manager of an into-plane fuelling operation has the overall responsibility for the fuelling operations under their control and is responsible for ensuring that all operations are carried out in accordance with the agreed procedures and following all generally accepted standards of safety and good practices.
- (c) The manager is entitled to visit and make any appropriate tests at the aerodrome depot as may be necessary to ensure that the fuel supplies received and stored at the aerodrome to be used for delivery to aircraft are of the requested quality.

SUPERVISION OF FUELLING OPERATIONS WITH PASSENGERS ON BOARD, BOARDING OR DISEMBARKING

- (d) The person monitoring the refuelling operations with passengers on board, boarding or disembarking is assigned by the aircraft operator, as per its operational procedures. This task may be performed by a person from the GH organisation responsible for aircraft turnaround or from the aircraft operator itself. All the other organisations performing GH activities during turnaround should be informed about who performs this task.
- (e) The person assigned with the task of monitoring the refuelling operations with passengers on board, boarding or disembarking should be trained, as a minimum, in the following areas:
 - (1) supervision of refuelling/defuelling operations, with knowledge specific to the aircraft type,
 - (2) communication methods used,
 - (3) aspects of the SMS commensurate with their tasks and responsibilities,
 - (4) dangerous goods,
 - (5) apron safety,
 - (6) the aircraft operator's procedures for refuelling and/or defuelling,
 - (7) the aerodrome operator's local procedure for apron safety during fuelling operations.

AMC1 GH.OPS.320 Potable water servicing

POTABLE WATER TESTING, CHEMICAL SUBSTANCES AND GSE

- (a) The GH organisation should ensure that regular tests are performed on the potable water at various water transfer points before it is uplifted into the aircraft potable water reservoir. Evidence of such tests should be kept in accordance with the documents and records requirements.

- (b) The chemical composition of the water to be uplifted into the aircraft potable water reservoir should meet the standards set by the World Health Organization or the relevant state authority, whichever is more stringent.
- (c) The potable water should be free from any unnecessary chemical substances and microorganisms. It may be treated with suitable disinfectants such as those based on chlorine or hydrogen peroxide. Ozone may also be present after further treatment, to provide additional disinfection and protection against microbiological contaminants.
- (d) The potable water servicing equipment should be maintained in accordance with the GSE maintenance programme. The truck should be clearly identified as 'drinking/potable water for aircraft' and regularly cleaned and disinfected in accordance with the applicable standards. When not in use, the potable water truck should be parked in an area different from the one where other GSE with non-potable water is parked.
- (e) The GH organisation should apply any other additional instructions of the aircraft operator.

AMC1 GH.OPS.335 Aircraft de-icing and anti-icing

APPLICABLE INDUSTRY STANDARDS

The GH organisation should apply the following industry (SAE) standards for de-icing and anti-icing, in their latest published version:

- (a) AS6285 – 'Aircraft Ground Deicing/Anti-Icing Processes';
- (b) AS6286 – 'Aircraft Ground Deicing/Anti-icing Training and Qualification Program';
- (c) AS6332 – 'Aircraft Ground Deicing/Anti-icing Quality Management';
- (d) AMS1424 – 'Deicing/Anti-Icing Fluid, Aircraft, Newtonian - SAE Type I for the deicing/anti-icing fluid quality control procedures';
- (e) AMS1428 – 'Fluid, Aircraft Deicing/Anti-Icing, Non-Newtonian, Pseudo-Plastic, SAE Types II, III and IV, as applicable, for the deicing/anti-icing fluid quality control procedures';
- (f) ARP6257 – 'Aircraft Ground De/Anti-Icing Communication Phraseology for Flight and Ground Crews'.

AMC2 GH.OPS.335 Aircraft de-icing and anti-icing

RESPONSIBILITIES OF THE GH ORGANISATION PROVIDING DE-ICING/ANTI-ICING SERVICES

- (a) The GH organisation providing de-icing/anti-icing services should develop, implement and maintain a de-icing/anti-icing programme compliant with the industry standards referred to in AMC1 GH.OPS.335.
- (b) The GH organisation is responsible for the following:
 - (1) ensure that quality control processes and procedures for de-icing/anti-icing are applied and maintained for continued operational safety;

- (2) adhere to the aircraft operator's procedures regarding the de-icing/anti-icing treatment of the aeroplane;
- (3) adhere to the aerodrome operator's standards and procedures related to safety and operability of the designated de-icing/anti-icing facilities or areas;
- (4) ensure that all personnel are effectively trained and qualified to coordinate, supervise and execute the de-icing/anti-icing treatments, and are familiar with, and apply the operational procedures as per the GH organisation's manual, the aircraft operator procedures specific to the aircraft type, and local aerodrome procedures;
- (5) ensure that sufficient competent personnel, adequate facilities equipment and de-icing/anti-icing fluids are available;
- (6) use de-icing/anti-icing fluids that are acceptable to the aircraft operator and are within the limits specified by the fluid manufacturer;
- (7) establish a communications process that ensures clear, concise and on-time communication for all de-icing/anti-icing operations, including with other organisations involved in the de-icing process (e.g. air traffic control, other GH organisations personnel, aircraft operator). For de-icing/anti-icing at remote pads, communication between the de-icing operator responsible for the operation and the flight crew should be established before beginning the de-icing/anti-icing process and continually maintained during the entire process, until the de-icing/anti-icing is completed and the aircraft departs from the de-icing area;
- (8) maintain an environmentally responsible de-icing operations programme;
- (9) liaise with the aerodrome operator on the procedures applicable to it as aerodrome user by attending meetings and communicating regularly.

AMC3 GH.OPS.335 Aircraft de-icing and anti-icing

DE-ICING AND ANTI-ICING PROCEDURES AND INSTRUCTIONS

- (a) The de-icing/anti-icing procedures should ensure compliance with the relevant regulations and global aircraft de-icing standards as referred to in AMC1 GH.OPS.335.
- (b) The procedures should cover all aspects of the aircraft ground de-icing/anti-icing process, including, but not limited to, instructions, tasks, responsibilities, authorisations and infrastructure for the de-icing/anti-icing process as follows:
 - (1) use of suitable de-icing/anti-icing treatment method according to SAE AS6285;
 - (2) procedures and instructions for de-icing/anti-icing at remote stands/facilities, when applicable;
 - (3) use of suitable de-icing/anti-icing equipment meeting the specification of ARP1971;
 - (4) verification, sampling, storage, requalification and operational quality assurance of de-icing/anti-icing fluids;

- (5) post-de-icing/anti-icing check, when applicable;
- (6) protocol for communications with the flight crew before, during and upon completion of the deicing/anti-icing operations;
- (7) communicating the anti-icing code and/or post-de-icing report to the flight crew, when applicable;
- (8) documentation of all de-icing/anti-icing treatments;
- (9) use of correct tools and clothing for de-icing/anti-icing personnel;
- (10) arrangements for environmental protection.

GM1 GH.OPS.335 Aircraft de-icing and anti-icing

ADDITIONAL DOCUMENTATION

- (a) ICAO Doc 9640 'Manual of Aircraft Ground De-icing/Anti-icing Operations' should be consulted and relevant information applied.
- (b) The following FAA documentation, published annually, should be consulted and relevant information applied:
 - (1) FAA Holdover Time Guidelines [for the corresponding Winter],
 - (2) FAA Ground Deicing Program – General Information.

AMC1 GH.OPS.335(a) Aircraft de-icing and anti-icing

PREPARATION FOR THE WINTER SEASON

- (a) The GH organisation should coordinate with the aerodrome operator and, whenever possible, the aircraft operator in preparation for de-icing/anti-icing operations sufficient time in advance of the winter season. The plan for the winter season should be communicated to all stakeholders concerned.
- (b) The GH organisation should ensure that its personnel have received adequate training to ensure their continued competence for the winter season, including to execute de-icing/anti-icing operations.

GM1 GH.OPS.335(a) Aircraft de-icing and anti-icing

PREPARATION OF DE-ICING/ANTI-ICING OPERATIONS IN COORDINATION WITH THE STAKEHOLDERS CONCERNED

- (a) It is recommended that coordination for the winter season include the following elements for all stakeholders involved, as a minimum and to a relevant extent:
 - (1) exchanging the documents/procedures/manuals covering winter season operations;

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- (2) the aerodrome operator and the GH organisation communicating local procedures at the aerodrome of operation, including instructions and procedures for cold weather operations, to the aircraft operators.
 - (b) Pooling of resources for de-icing/anti-icing operations should be enabled whenever feasible and efficient.
 - (c) It is recommended that the following components be ensured or checked, as a minimum:
 - (1) remote de-icing pads verified for serviceability and preventive maintenance of GSE to ensure their proper operation;
 - (2) initial or recurrent training for GH personnel, as applicable;
 - (3) availability of de-icing/anti-icing fluids;
 - (4) fluid quality checks;
 - (5) fluid storage facilities' serviceability (functionality of pumps, valves, equipment filling point nozzles, etc.);
 - (6) availability of operational procedures, including any updates and specific or local operational procedures of aircraft operators and aerodrome operator.
 - (d) It is recommended to test, when possible, the plan for winter operations with the aerodrome operator, with the optional participation of aircraft operators.

SUBPART 4 — AIRCRAFT TURNAROUND

AMC1 GH.OPS.400 Coordination of aircraft turnaround activities

GENERAL

- (a) Turnaround coordination should cover the GH services provided to an aircraft between the moment when the aircraft leaves the centre line of the taxiway to park at a stand until it departs from the stand.
- (b) The instructions and procedures for turnaround coordination should address at least the following key safety risks:
 - (1) injuries to passengers around the aircraft due to lack of coordination during passenger boarding/disembarkation,
 - (2) injury/death of personnel on the apron,
 - (3) accidents/incidents during take-off due to incorrect aircraft loading,
 - (4) damage to GSE/aircraft due to improper coordination between GH organisations providing different GH services during turnaround,
 - (5) collision between vehicles or between vehicles and aircraft,
 - (6) jet blast incidents.

AMC2 GH.OPS.400 Coordination of aircraft turnaround activities

TURNAROUND COORDINATION FUNCTION AND ACTIVITIES

- (a) The aircraft turnaround activities should be coordinated by one person or by means of a computerised system.
- (b) The turnaround coordination function is responsible for monitoring and coordinating the following GH activities:
 - (1) aircraft arrival;
 - (2) operation of GSE to or around the aircraft, including PBBs, passenger stairs and loading equipment for baggage and cargo operations;
 - (3) aircraft loading/unloading;
 - (4) passenger disembarkation and boarding, including PRMs;
 - (5) ground transport of passengers, crews, baggage and cargo;
 - (6) aircraft refuelling; the aircraft operator may assign the additional task of monitoring the refuelling operations with passengers on board, boarding or disembarking;
 - (7) potable water and aircraft toilet servicing;
 - (8) catering unloading/loading;

- (9) aircraft departure activities;
 - (10) aircraft pushback/towing;
 - (11) aircraft de-icing/anti-icing when not carried out at a remote stand;
 - (12) any other additional tasks requested by the aircraft operator;
 - (13) coordination and communication with those performing the GH services indicated above and with load control personnel;
 - (14) coordination and communication with the aircraft operator's flight crew, the aerodrome operator and any other organisations involved in the GH activities to the aircraft on the apron and preparation for flight, as required.
- (c) The procedure for the turnaround coordination function should ensure the presence of safe and effective equipment staging areas on the apron. Effective configuration of stands should be coordinated with the aerodrome operator.
- (d) The turnaround coordination function should establish and implement a ground communications system and clear lines of communication with the organisations or persons responsible for the provision of various GH services to the same aircraft during turnaround.

AMC1 GH.OPS.405 Aircraft arrival

INSPECTION OF THE PARKING STAND

The GH organisation should ensure that the assigned parking stand is checked prior to aircraft arrival to ensure the following:

- (a) the personnel apply the aerodrome operator's FOD programme;
- (b) the parking stand is free of GSE and personnel other than those required to assist during the aircraft's arrival at the aircraft stand, with the airbridge fully retracted.

AMC1 GH.OPS.415 Aircraft loading and unloading

AIRCRAFT LOADING AND UNLOADING

- (a) The procedures for aircraft loading and unloading should cover the following key risks, as a minimum:
 - (1) injuries to persons;
 - (2) damage to the aircraft;
 - (3) failure to communicate any last-minute changes to the persons responsible for aircraft load planning and the aircrew, in accordance with the aircraft operator's procedures;
 - (4) improper restraining and securing of load in the cargo compartment, leading to changes in the aircraft's centre of gravity or the actual weight of the aircraft due to load shifting during flight;
 - (5) use of inadequate ULDs or restraint systems;

- (6) failure to comply with the loading instructions, with a negative effect on aircraft load limitations and spread limitations;
- (7) unfamiliarity with the cargo compartment configuration;
- (8) use of inadequate GSE for loading/unloading;
- (9) for cargo aircraft only (CAO), additional risk areas may be:
 - (i) higher amount of dangerous goods in CAO;
 - (ii) larger and heavier or oversized freight and ULDs (e.g. engines, cars, industrial equipment and machinery, large and heavy live animals);
 - (iii) aircraft's main deck as a complex loading hold with different positions and restrictions.
- (b) When different team leaders are used for inbound and outbound flights, they should ensure a formal and complete handover of tasks and briefing on special procedures or loading/unloading specificities. The unloading team should have a copy of the inbound container pallet message identifying the position of the ULDs or pallets in the cargo compartments.
- (c) The loading/unloading teams should be aware of and apply any instructions of the aircraft operator requiring that its fly-away kit be always carried on board the aircraft.
- (d) The procedures and documentation related to restraint equipment should be specific to the aircraft type and in accordance with the aircraft operator's instructions regarding aircraft mass and balance documentation.
- (e) The loading and unloading procedure should include a step covering gross error checks in securing load and restraint devices.

AMC2 GH.OPS.415 Aircraft loading and unloading

SAFETY RISK MITIGATION MEASURES FOR LOADING AND UNLOADING DANGEROUS GOODS

- (a) The procedures for aircraft loading/unloading should cover the following safety objectives:
 - (1) prevention of damage to packages and ULDs (pallets and containers);
 - (2) consolidation of dangerous goods to ensure segregation of incompatible dangerous goods and comply with ICAO's Technical Instructions;
 - (3) separation and segregation of packages to prevent interaction between incompatible DG and other cargo;
 - (4) prevention of movement during ground transport and during flight;
 - (5) prevention of shipments labelled CAO from being loaded on passenger aircraft.
- (b) In case of damaged or leaking packages:
 - (1) packages found damaged or leaking before loading should not be loaded into an aircraft;
 - (2) packages found damaged or leaking in the cargo compartment should be unloaded from the aircraft;

- (3) if leakage is found in the cargo compartment, check for other contaminated packages and assess if they can be transported;
- (4) inform the commander/pilot-in-command by applying the NOTOC procedure;
- (5) apply any additional procedures, including for reporting, of the aircraft operator and aerodrome operator.

GM1 GH.OPS.415(d) Aircraft loading and unloading

AIRCRAFT CARGO COMPARTMENTS

As stated in point GH.OPS.415(d), the aircraft cargo compartments must be empty prior to loading, with several exceptions:

- (a) a fly-away kit containing items and tools necessary for aircraft repairs, which is required by the aircraft operator to be carried on all flights (may be carried in a customised ULD or in a different way);
- (b) other equipment (equipment in compartment (EIC)), company mail (COMAIL) or company material (COMAT);
- (c) ballast;
- (d) in the case of transit flights, for which the baggage, cargo and mail loaded for the next or final destination remain on board the aircraft.

GM1 GH.OPS.415(h) Aircraft loading and unloading

LOADING INSTRUCTIONS/REPORT (LIR)

- (a) The loading instructions document (also called 'loading instructions/report' or 'LIR') is generated for the purpose of providing support to the person supervising the aircraft loading in order to facilitate this activity and ensure that the load distribution and aircraft loading are completed as per the instructions.
- (b) The loading instructions contain information about the maximum mass of items that may be loaded in each cargo compartment and instructions for the safe and optimal distribution of items to be loaded in the cargo compartments, along with the cargo segregation rules.
- (c) The LIR may be part of an existing mass and balance document or a separate form.
- (d) Usually, the signature on the LIR of the person responsible for loading supervision is the confirmation that the aircraft has been loaded in accordance with the loading instructions. The function of this signed document is to serve as a report. A signed copy of the LIR is retained on the ground.

AMC1 GH.OPS.420 Loading supervision

LOADING SUPERVISION

- (a) For loading of oversized cargo on cargo aircraft, the person carrying out the loading supervision function should be present for the entire loading process in order to ensure that it has been completed in accordance with the established procedures and the aircraft operator's procedures.
- (b) On completion of loading, the person carrying out the loading supervision function should sign the loading instructions document to confirm that the loading has been completed in accordance with the instructions.

GM1 GH.OPS.420 Loading supervision

BRIEFING OF THE LOADING/UNLOADING TEAMS

It is recommended that briefings cover the following elements, as applicable:

- (a) special loads,
- (b) unloading/loading sequence,
- (c) load restraint details,
- (d) aircraft cargo compartment configuration or loading restrictions,
- (e) availability of necessary restraint/securing equipment,
- (f) any other element that is considered relevant to the operational context.

AMC1 GH.OPS.430 Aircraft departure activities

SAFETY RISK MITIGATION MEASURES FOR PRE-DEPARTURE AND DEPARTURE ACTIVITIES

- (a) The procedure for pre-departure activities should include, as a minimum, the following safety risk mitigation measures:
 - (1) pre-departure check of the aircraft and the stand to verify that:
 - (i) the stand is clear of FOD;
 - (ii) any GSE unnecessary for aircraft start and departure is removed, and no persons are in the hazard area;
 - (iii) there is no visible aircraft damage;
 - (iv) all aircraft doors and panels are closed;
 - (2) correct pushback equipment for aircraft type/subtype.
- (b) The procedure for departure activities should cover the following:
 - (1) communication, including phraseology/standard hand signals, between the flight crew and the person responsible for the departure operation;

- (2) agreement and following of engine start sequence, and application of operational procedures for the use of air start unit, if required;
- (3) disconnection of the GSE (air start unit, ground power unit, etc.) and removal from the equipment restricted area;
- (4) pushback or towing procedures include correct pushback or towing equipment for aircraft type/subtype and other conditions specific to the operational context.

AMC1 GH.OPS.435 Aircraft towing and pushback

SAFETY RISK MITIGATION MEASURES

The aircraft towing or pushback procedures should cover the following:

- (a) means of developing and maintaining situational awareness of traffic during aircraft towing/pushback operations;
- (b) communication between the towing/pushback vehicle driver and, if applicable, the wing walker or the flight crew in the cockpit;
- (c) use of towing/pushback GSE adequate for the aircraft type;
- (d) use of methods to reduce risks caused by:
 - (1) multiple blind spots around the aircraft,
 - (2) wing walker being struck by lightning via the cord,
 - (3) operator tripping or snagging machinery as they carry a 15-m-long copper cable around,
 - (4) inadvertent brake application during towing by GH personnel.

GM1 GH.OPS.440 Communication and phraseology

DEVIATIONS FROM STANDARD PHRASEOLOGY DURING PUSHBACK AND TOWING OPERATIONS

It is recommended that the GH organisation record, as part of its internal reporting, cases of deviations from standard phraseology during towing and pushback that endanger these operations. The purpose of collecting such data is to use it to identify potential safety hazards and apply the appropriate mitigation measures to ensure safe towing and pushback operations.

SUBPART 5 — CARGO AND MAIL HANDLING

GM1 GH.OPS.500 Cargo and mail handling — General requirements

CARGO HANDLING ACTIVITIES IN A CARGO WAREHOUSE

- (a) A cargo warehouse in the scope of Commission Delegated Regulation (EU) 2025/20 is any cargo handling facility located at the aerodrome premises or adjacent to it (i.e. in its immediate vicinity) that is authorised to accept cargo ready for carriage, storage and final build-up, and to perform final checks before air transport.
- (b) The cargo warehouse activities are more diverse and cover more aspects of the cargo transportation chain than those related to the preparation of cargo to ensure flight safety.
- (c) The activities occurring at the cargo warehouse that are not directly related to points GH.OPS.600(c)(1) and (c)(2) are not included in the scope of Commission Delegated Regulation (EU) 2025/20.

GM1 GH.OPS.500(d) Cargo and mail handling — General requirements

CARGO HANDLING ACTIVITIES INVOLVING QUALIFIED PERSONNEL OF THE AIRCRAFT OPERATOR

- (a) The aircraft operator may send qualified personnel to ensure that the aircraft and its cargo are handled in accordance with its operational procedures. For example, the aircraft operator's personnel may be involved in the cargo handling process: aircraft offloading/loading supervision, cargo build-up supervision, etc.
- (b) Whether cargo is handled with or without direct involvement of the personnel of the aircraft operator, it is subject to compliance with Commission Delegated Regulation (EU) 2025/20 and the applicable requirements of Regulation (EU) No 965/2012.

GM1 GH.OPS.505 Handling of special cargo, other than dangerous goods

SPECIAL CARGO

The following items are considered special cargo:

- (a) pharmaceutical products,
- (b) live animals,
- (c) perishable items,
- (d) wet cargo,
- (e) human remains,
- (f) oversized and/or heavy items,

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- (g) any other items that require special handling and/or transport.