# Annex IV OPERATIONAL REQUIREMENTS FOR GROUND HANDLING SERVICES (PART GH.OPS)

#### Rationale for the entire Annex

- The implementing rules in this section are formulated like safety objectives. Regardless of who the GHSP is – whether an independent organisation or the aircraft operator performing selfhandling, the safety objective expressed in this rule must be met. That is why passive voice is preferred instead of active voice for the verb action.
- 2. The main focus is on the implementing rules. More AMC and GM will be added at a later stage.
- 3. This Annex will be further improved to include more content or references to the ICAO Doc 10121 Ground Handling Manual.

## GH.OPS.005 General requirements

- (a) The ground handling service provider shall provide services in accordance with the operational procedures and instructions of the aircraft operator. Where aircraft operator procedures or instructions are not provided, the GHSP shall provide services in accordance with the operational procedures developed under its own management system and included in its ground handling manual. Those procedures shall observe the following principles:
  - (1) be based on industry good practices;
  - (2) be appropriate to the aircraft type and operational context;
  - (3) include the aircraft operator's safety instructions or variations from the industry good practices.
- (b) The GHSP and the aircraft operator performing self-handling shall ensure that all general elements of control for the management of safety risks are in place and functional during the provision of ground handling services as follows:
  - (1) A policy establishing the safety accountability, authority and responsibility of the aircraft operator, the GHSP and the aerodrome operator, as part of the SMS interfaces.
  - (2) A process to ensure exchange of safety information relevant for the interface activities through safety promotion activities, regular meetings, safety bulletins or other activities.
  - (3) Training programme and qualification criteria to ensure the personnel are competent to perform the tasks as per the required standards.
  - (4) Personnel are aware of their duties and responsibilities and understand their role in the safety of air transport operations.

- (5) Equipment and tools including ground support equipment (GSE) and software are functional, and maintenance, calibration, and accuracy are verified and current.
- (6) All GSE motorised and non-motorised are compliant with the maintenance programme and accessed by personnel trained and qualified for the purpose.
- (7) Manuals, instructions, and any necessary documentation are available and current.
- (8) Operational procedures provided by the aircraft operator are observed; where they are not provided, operational procedures of the GHSP are observed.
- (9) Aerodrome operator procedures are observed.
- (10) Deviations from procedures and any safety events are reported as per Annex IV to Commission Regulation (EU) 2015/1018 (Mandatory reporting) and Regulation (EU) 376/2014.
- (11) A process for continuous improvement of the operational procedures and instructions to increase safety of operation.
- (c) The GHSP shall ensure that the manuals, operational procedures and instructions are written in a language that can be understood by the personnel responsible for their application.
- (d) The operational procedures for the flight dispatch activities and for the load planning, mass and balance calculation and production of related load control documents shall be developed by the aircraft operator in compliance with the provisions of Regulation (EU) 965/2012.

#### Rationale for point (c)

A GM will be developed for point (c) to explain that the intention of this paragraph is to ensure that the personnel receive the instructions applicable to their tasks in a language that they can understand. This means parts of the manuals and procedures can be translated. The translation can be organised by the GHSP as it considers best – either by translating the full documents or by ensuring supervisors who understand the language will further translate the relevant parts into the language understood by the personnel.

## **GM1 GH.OPS.005 General requirements**

#### **OPERATIONAL PROCEDURES FOR DELIVERED GH SERVICES**

The definition of GH services included in Regulation (EU) 2018/1139 is based on the list of GH activities included in the Annex to the EC Directive 96/67/EC.

However, the GH activities covered by this Regulation do not match the list included in the EC Directive, as some of those services are either covered by other existing regulations for other aviation domains or are not related to the safety of operation.

For easy reference, the following table shows by comparison the list of GH activities included in the definition of Reg. (EU) 2018/1139 and the list of GH services included in the Annex to the EC Directive 96/67/EC (right column).

Regulation (EU) 2018/1139	EC Directive 96/67/EC				
	(only yellow-highlighted services are covered by Reg. (EU)				
	<mark>2018/1139)</mark>				
Ground supervision <sup>(1)</sup>	Ground administration and supervision, comprising: representation and liaison services with local authorities or any other entity, disbursements on behalf of the airport user and provision of office space for its representatives; load control, messaging and telecommunications; handling, storage and administration of unit load devices; any other supervision services before, during or after the flight and any other administrative service requested by the airport user.				
Flight dispatch and load control <sup>(2)</sup>	<ul> <li>See 1.2 Load control above; and</li> <li>9. Flight operations and crew administration comprising:</li> <li>9.1 preparation of the flight at the departure airport or at any other point;</li> <li>9.2 in-flight assistance, including re-dispatching if needed;</li> <li>9.3 post-flight activities;</li> <li>9.4 crew administration.</li> </ul>				
Passenger handling <sup>(3)</sup>	2. Passenger handling				
Baggage handling <sup>(4)</sup>	3. Baggage handling				
Freight and mail handling <sup>(5)</sup>	Freight and mail handling comprising: for freight: physical handling of export, transfer and import freight, handling of related documents, customs procedures and implementation of any security procedure agreed between the parties or required by the circumstances; for mail: physical handling of incoming and outgoing mail, handling of related documents and implementation of any security procedure agreed between the parties or required by the circumstances.				

Apron handling of aircraft <sup>(6)</sup>	5.	Ramp handling comprising:
	5.1	marshalling the aircraft on the ground at arrival and departure
		(*);
	5.2	assistance to aircraft parking and provision of suitable devices
		(*);
	5.3	communication between the aircraft and the air-side supplier
		<mark>of services</mark> (*);
	5.4	the loading and unloading of the aircraft, including the
		provision and operation of suitable means, as well as the
		transport of crew and passengers between the aircraft and the
		terminal, and baggage transport between the aircraft and the
	<b>-</b> -	terminal;
	5.5	the provision and operation of appropriate units for engine starting;
	5.6	the moving of the aircraft at arrival and departure, as well as
	<mark></mark>	the provision and operation of suitable devices;
	5.7	the transport, loading on to and unloading from the aircraft of
	<u></u>	food and beverages.
	(*):	provided that these services are not provided by the air traffic
	. ,	service.
Aircraft services <sup>(7)</sup>	C	Alexandt complete computation
Aircraft services	6. 6.1	Aircraft services, comprising external and internal cleaning of the aircraft, and the toilet and
	0.1	water services;
	6.2	cooling and heating of the cabin, removal of snow and ice, de-
	0.2	icing of the aircraft;
	6.3	rearrangement of cabin with suitable cabin equipment, the
		storage of this equipment.
(9)	_	
Fuel and oil handling <sup>(3)</sup>	7.	Fuel and oil handling
-	8.	Aircraft maintenance, comprising
	8.1	routine services performed before flight;
	8.2	non-routine services requested by the airport user;
	8.3	the provision and administration of spare parts and suitable
		equipment;
	8.4	the request for or reservation of a suitable parking and/or
		hangar space.
-	10.	Surface transport comprising
	10.1	the organization and execution of crew, passenger, baggage,
		freight and mail transport between different terminals of the
		same airport, but excluding the same transport between the
		aircraft and any other point within the perimeter of the same
		airport;
	10.2	any special transport requested by the airport user.
-	11.	Catering services comprising:
	11.1	liaison with suppliers and administrative management;
	11.2	storage of food and beverages and of the equipment needed
		for their preparation;
	11.3	cleaning of this equipment;

11.4 preparation and delivery of equipment as well as of bar and
food supplies.

Notes:

- (1) Operational supervision; nominated person for safety representing the GHSP at an aerodrome; handling and storage of ULD under Note (6).
- (2) Flight dispatch activities are covered by Regulation (EU) 965/2012, as a typical flight operations function in direct connection to the operational control system of the aircraft operator. Sometimes outsourced, but most frequently done by the aircraft operator.

Load control: load planning, mass and balance calculations and production of related documents are not included in this Regulation. These activities will be under the management and control of the aircraft operator and regulated under Reg. (EU) 965/2012. The aircraft loading and unloading activities will be included under Aircraft handling services. See Article 1 to this Regulation.

- (3) Passenger handling includes safety aspects related to passenger acceptance (at the aerodrome), gate and boarding activities.
- (4) Baggage handling includes acceptance, processing for transport, loading and unloading (transportation between the baggage processing area and the aircraft).
- (5) Physical handling/transportation of freight and mail between the warehouse located on the aerodrome and the aircraft; loading and unloading as part of warehouse handling activities.
- (6) Securing of aircraft on ground; aircraft towing and pushback; passenger stairs, air bridge; handling and storage (appropriateness, serviceability – at least visual check as a minimum) of ULD only if performed at the aerodrome location; handling of GSE, including the catering vehicle and ambulift, GSU, GPU, APU; aircraft loading and unloading.
- (7) Aircraft services includes de-icing and anti-icing; cleaning, toilet and potable water servicing: only apron movements of GSE and loading & unloading from the aircraft. In-the-aircraft activities only related to safety aspects of cleaning in the flight crew compartment.
- (8) Oil handling is covered by Reg. 1321/2014 as a typical maintenance task and therefore will not be addressed by this Regulation.

#### Rationale

This table is provided only for comparison reasons. No changes are expected to be made to the elements in the right-hand column, as those are quoted from the Council Directive 96/67/EC. They only indicate – in yellow highlights – which services are taken over and addressed through RMT.0728 and included in this Regulation or other relevant regulations, such as Reg. (EU) 965/2012, 139/204 or 1321/2014.

# GH.OPS.010 Allocation of responsibilities and interfaces between GHSP, air operators and aerodrome operators

The GHSP shall ensure that its operational procedures for the services provided clearly identify also the responsibilities of the aircraft operator and aerodrome operator involved in each of those GH activities, as the case may be.

# GM1 GH.OPS.010 Allocation of responsibilities and interfaces between GHSP, air operators and aerodrome operators

#### INTERFACES BETWEEN GHSP, AIR OPERATORS AND AERODROME OPERATORS

The following GH activities have been identified to require operational interfaces between the GHSP, the aircraft operator and the aerodrome operator (table to be further aligned with ICAO Doc 10121).

Activity	Aerodrome operator	Aircraft operator	GHSP
Walking and working airside	<ul> <li>Set the overall design and operation of the airside areas (Already addressed in the ADR Regulation)</li> <li>Set and ensure the application of general safety policies and procedures such as access to airside, apron discipline, use of PPE, etc.</li> <li>(Already addressed in the ADR Regulation, training)</li> </ul>	<ul> <li>Set and ensure the application of general safety rules on aircraft turnaround, such as driving in the vicinity of, walking around and approaching the aircraft</li> <li>(Air Operator to have a procedure for aircraft turnaround safety)</li> </ul>	<ul> <li>Ensure training is in place and compliance by its personnel with aerodrome and air operator general safety policies and procedures</li> <li>Assess local risks and job tasks to identify any additional PPE such as high visibility clothing, safety shoes or boots, clothing appropriate to the weather, gloves, face protection or safety goggles</li> </ul>
Vehicle and equipment operation	<ul> <li>Develop rules for the operation of vehicles on the apron, including a formal driver training, assessment and licensing scheme for all drivers operating on the movement area</li> </ul>	Driving and approaching aircraft	<ul> <li>Ensure that personnel are trained and competent to operate the vehicles and equipment they are expected to drive and operate, in accordance with the manufacturers and air and</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
	<ul> <li>Develop an agreed set of minimum standards for the condition and maintenance of airside vehicles</li> <li>May perform regular vehicle checks</li> <li>Issue an airside vehicle permit for any vehicle operating airside (covered in ADR regulation)</li> </ul>		<ul> <li>aerodrome operators' requirements (in Annex III, ORGH management system)</li> <li>Ensure that vehicle/equipment maintenance schedules are followed and serviceability checks are conducted (in Annex III, ORGH management system)</li> <li>Ensure that its vehicles and personnel comply with the aerodrome driving rules (in Annex III, ORGH management system)</li> </ul>
Foreign Object Debris (FOD)	<ul> <li>Develop a comprehensive FOD management programme including detection, prevention and evaluation of FOD on the airport (Covered in ADR Regulation)</li> </ul>	<ul> <li>Develop a comprehensive FOD management programme including detection, prevention and evaluation of FOD (To be included in GROUND OPS and create the link to the ADR Regulation)</li> <li>Make its personnel aware of the hazards of FOD to aircraft and individuals</li> </ul>	<ul> <li>Participate in the aerodrome operator's and air operators' FOD management programmes and should encourage all personnel to adhere to it (in GH.OPS.505)</li> <li>Supervisors should constantly be aware of the potential for FOD and be knowledgeable of their area of responsibility and ensure personnel are aware of and are participating in the FOD prevention programme effort (Training and management issue)</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
			<ul> <li>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 (Training and management issue, reports to the ADR operator)</li> </ul>
Equipment approaching the aircraft		<ul> <li>Define the rules to be followed for all equipment approaching their aircraft, including but not limited to speed, brake checks, situations where a guide person is needed, clearance from the fuselage and equipment chocking (See previous)</li> </ul>	<ul> <li>Ensure that personnel are trained according to the rules provided by the air operators (Training)</li> <li>Ensure that GSE servicing the aircraft avoids any contact with the fuselage, especially GSE servicing aircraft doors. (Element of the air operator responsibilities)</li> <li>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 ground handling process (Element of the air operator responsibilities)</li> <li>Ground equipment which interfaces with the aircraft passenger doors should have</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
General safety during fuelli		<ul> <li>Develop policies and procedures</li> </ul>	<ul> <li>platforms of sufficient width that will allow the aircraft doors to be opened/closed with the equipment in place and the safety rails deployed.</li> <li>(Rule for the GHSP to have appropriate means to conduct a given operation)</li> <li>Ensure its personnel are aware</li> </ul>
operations	<ul> <li>working on apron areas are aware of the safe working practices appropriate to the aircraft fuelling and defueling operations</li> <li>(This is covered in the ADR regulation)</li> </ul>	for basic safety during fuelling, including precautions for fuelling with passengers on board (Partly covered in the Air Ops regulation)	<ul> <li>of and take precautions during fuelling operations, safety zones, use of portable electronic devices and sources of ignition, connection of electrical equipment to the aircraft, parking restrictions and emergency procedures including fuel spillages (Training and safety promotion)</li> <li>Provide specific training to personnel on safety measures applicable during fuelling with passengers on board</li> <li>Verify the application of safety measures, in particular the provision of clear areas for the deployment of evacuation slides</li> <li>(Operational procedure should be in the Air operator's manual)</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
Adverse weather conditions	<ul> <li>Ensure that relevant information on adverse weather conditions are provided to aerodrome users in a timely manner, as well as any applicable restrictions to the operations, such as low visibility (ADR Regulation)</li> </ul>	<ul> <li>Develop policies and procedures for the ground handling of their aircraft during adverse weather conditions which could include extreme temperatures, environmental contamination, and instances such as high winds, low visibility and electrical storms where it is unsafe for servicing operations to be conducted</li> </ul>	- Ensure that its personnel are aware of hazards and precautions to take during adverse weather conditions and that notice of such conditions is communicated to front-line personnel in an effective and timely manner
General awareness of dangerous goods	<ul> <li>Have procedures in place to respond to incidents involving dangerous goods</li> </ul>	<ul> <li>Develop policies and procedures for the carriage of dangerous goods on their aircraft</li> </ul>	<ul> <li>Ensure that its personnel is qualified to identify, document, package, handle and load dangerous goods as required by their responsibilities in the operation</li> <li>Have procedures to ensure dangerous goods incidents and accidents are reported to the air operator and as applicable, to competent authorities.</li> </ul>
Turnaround coordination		<ul> <li>Air operators and GHSPs should a</li> <li>A turnaround coordinator functio plan</li> </ul>	gree on a turnaround plan n should facilitate adherence to the
Load planning		<ul> <li>Develop procedures in accordance with the air ops requirements to include load planning, mass&amp;balance calculations, production of a</li> </ul>	-

Activity	Aerodrome operator	Aircraft operator	GHSP
Aircraft arrival	<ul> <li>Ensure that the allocated stand is serviceable and suitable for the aircraft characteristics</li> <li>Communicate to the GHSP the initially allocated stand and any changes in a timely manner</li> </ul>	<ul> <li>Load Instruction/Report, finalization of a load sheet, last minute changes and special load Notification to the Captain (NOTOC), as applicable</li> <li>Ensure any verbally received load information, which could affect aircraft mass and balance, is documented and communicated to the person responsible for final calculation of weight and balance prior to each flight.</li> <li>Send the GHSP any instructions for aircraft loading</li> <li>Ensure that the phraseology, signals and procedures regarding communication between GHSP personnel and flight deck for arrival are established, practiced and used by flight crew when communicating with GHSP personnel and vice versa</li> <li>Ensure that procedures regarding aircraft ground movement are established, including: actions before arrival, standard arrival procedure, use</li> </ul>	<ul> <li>Position the personnel performing the turnaround away from hazard zones</li> <li>GSE required for aircraft handling should be available, serviceable and positioned well clear of the aircraft path, normally outside the equipment restraint area.</li> <li>Personnel in charge of arrival to conduct FOD check on stand prior to aircraft arrival.</li> <li>Ensure that the emergency procedures are understood and the equipment and</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
		of GSE, danger areas, back-up communications	<ul> <li>infrastructure to be used is serviceable</li> <li>If the GHSP provides marshalling service, it should agree with the aerodrome operator.</li> <li>Standard hand signals and agreed phraseology (if applicable) to be used for all communication between flight crew and ground personnel.</li> <li>Marshallers and wing walkers to be distinguishable to the flight crew and utilise during daytime operations either wands or mitts, of a high visibility colour, or during low visibility/night operations lighted wands</li> <li>Ensure the personnel understand the use of aircraft anti-collision lights. When an aircraft has an unserviceable APU, specific procedures to be followed to connect the ground power prior to anti-collision lights switched-off.</li> <li>Ensure that required number of serviceable chocks are available for the aircraft to be chocked. The aircraft should not be approached to position the nose</li> </ul>

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Activity	Aerodrome operator	Aircraft operator	GHSP
			wheel chocks until the aircraft has come to a complete stop. Personnel should notify the flight deck crew that the chocks are inserted.
Passenger boarding bridges (PBB) and passenger stairs	<ul> <li>Make available training standards and procedures for the usage of each type of PBB operated at the airport.</li> <li>Ensure that any third-party operating PBB is trained to do so, according to the established training programme</li> </ul>	- Develop policies and procedures for the use of PBB and stairs on their aircraft, including operation of doors and communication with the cabin crew	- Ensure that personnel operating a PBB or passenger stairs are qualified to do so and familiar with the safety features of the equipment they are operating.
Ground power and pre-conditioned air	<ul> <li>Make available training material and procedures for the usage of fixed ground power and pre- conditioned air units</li> <li>Ensure that fixed ground power and pre-conditioned air units are serviceable and adapted to the aircraft requirements</li> <li>Ensure that any equipment that is inoperable is removed from the service immediately and notified to the users</li> </ul>	<ul> <li>Develop policies and procedures for the use of ground power and pre-conditioned air on their aircraft, including sequencing and communication with the flight and cabin crew</li> </ul>	<ul> <li>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</li> </ul>
Loading and unloading		<ul> <li>Develop policies and procedures for the loading and unloading of the aircraft, which might include operation of cargo doors. Load classifications and priorities,</li> </ul>	<ul> <li>Ensure that personnel assigned to perform loading and unloading functions are qualified. This includes manual handling, understanding of</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
		sequencing, load securing, special precautions for aircraft hold fire detection systems and special loads such as live animals, dangerous goods, urgent aircraft parts and other air operator materials	loading instruction and report, report the final load including deviations, ULD serviceability, aircraft hold inspection and other characteristics such as tipping tendency
Elevating equipment		<ul> <li>Develop policies and procedures for the use of elevating equipment on their aircraft, such as use of chocks / stabilizers, proximity restrictions and doors operation</li> </ul>	<ul> <li>Ensure that personnel operating elevating equipment are qualified to do so and familiar with the features of the equipment they are operating</li> </ul>
Toilet and potable water servicing	<ul> <li>Provide facilities to uplift potable water and dispose of aircraft toilet waste</li> <li>Coordinate with the GHSP to ensure that adequate procedures are in place to manage any spillages during toilet servicing in accordance with local health, safety and environmental regulations</li> </ul>	<ul> <li>Develop policies and procedures for toilet and water servicing, including liquid quantities required for specific aircraft potable water and toilet configurations</li> </ul>	<ul> <li>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</li> </ul>
Air start unit	<ul> <li>In the case of air start engine start up on the stand, establish special precautions regarding jet blast</li> </ul>	<ul> <li>Establish policies and procedures for the use of an air start unit on its aircraft.</li> </ul>	Ensure that personnel performing air start procedures are qualified to do so and familiar with the features of the equipment they are operating. This includes precautions for correct and safe connection to the aircraft, operator communication with the

Activity	Aerodrome operator	Aircraft operator	GHSP
			flight crew and other team members.
Aircraft departure	<ul> <li>Ensure protection against jet blast and engine ingestion effects are in place, where applicable</li> <li>In coordination with ANS and AMS, consider the development of standard push back procedures for the movement of aircraft on aprons and taxiways</li> </ul>	<ul> <li>Develop policies and procedures for the safe departure of their aircraft from the stand.</li> <li>Ensure that phraseology, signals and procedures regarding communication between ground and flight deck related to the departure are established, practiced and used by flight crew when communicating with ground staff and vice versa</li> </ul>	<ul> <li>Ensure personnel performing aircraft departure procedures are qualified for the method being utilised (push back, taxi- out or power back) and familiar with the features of any equipment they are operating. This should include:         <ul> <li>Aircraft pre-departure inspection</li> <li>Stand safety check including FOD inspection</li> <li>Use and removal of aircraft steering bypass pin</li> <li>Maximum gear turn limits</li> <li>Airport infrastructure limitations</li> </ul> </li> </ul>
Towing	<ul> <li>Consider development of standard aircraft towing routes and procedures in coordination with ANS and AMS</li> <li>The use of anti-collision lights and communication with ATC, for movements on aprons and taxiways</li> </ul>	<ul> <li>Develop policies and procedures for towing of their aircraft, including:         <ul> <li>Type of towing equipment suitable to aircraft type</li> <li>Connection and disconnection of equipment to the aircraft</li> <li>Communication between the ground and the flight deck</li> </ul> </li> </ul>	<ul> <li>Ensure that personnel performing towing procedures are qualified to do so and are familiar with the features of any equipment they are operating.</li> </ul>

Activity	Aerodrome operator	Aircraft operator	GHSP
Activity Aircraft de-icing and anti-icing	<ul> <li>Define the location and facilities used for aircraft de-icing and anti-icing on the airport.</li> <li>Develop or ensure that procedures are in place for the collection and recovery of de- icing and anti-icing fluids.</li> <li>When responsible for the storage or handling of de-icing or anti-icing fluid, ensure that pre-season, receipt and other required quality assurance</li> </ul>	<ul> <li>Aircraft operator</li> <li>Use of anti-collision lights and emergency procedures</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>When responsible for the storage or handling of de-icing and anti-icing fluids, ensure that pre-season, receipt, truck filling</li> </ul>
	checks are performed.		and other required quality assurance checks are performed, and that fluid meets the specifications prior to being used in operations.

## GH.OPS.015 Language proficiency

- (a) The GHSP shall comply with the language proficiency requirements for vehicle drivers of point ADR.OPS.B.029 of Regulation (EU) 139/2014.
- (b) Other GH functions required to demonstrate English language proficiency are:
  - (1) GH services supervision and station representation
  - (2) GH personnel supervision
  - (3) Passenger acceptance, gate and boarding services
  - (4) Aircraft ground movement for services involving radio communication with the flight crew and/or ATS unit
  - (5) Aircraft fuelling
  - (6) Aircraft de-icing/anti-icing.
- (c) A person required under points (a) and (b) to demonstrate language proficiency shall demonstrate proficiency, at least at an operational level both in the use of phraseologies and in plain language, in accordance with point (d), in:
  - (1) the English language; and
  - (2) any other language or languages used at the aerodrome for radio communication purposes with the aerodrome operator or the air traffic services unit.
- (d) The applicant shall demonstrate the ability to:
  - (1) communicate effectively in voice-only and in face-to-face situations;
  - (2) communicate on common and work-related topics with accuracy and clarity;
  - (3) use appropriate communicative strategies to exchange messages and to recognise and resolve misunderstandings in a general or work-related context;
  - (4) handle successfully the linguistic challenges presented by a complication or unexpected turn of events which occurs within the context of a routine work situation or communicative task with which they are otherwise familiar;
  - (5) use a dialect or accent which is intelligible to the aeronautical community.
- (e) Language proficiency shall be demonstrated by a certificate issued by the organisation that conducted the assessment, attesting the language or languages, the level or levels of proficiency, and the date of the assessment.
- (f) Except for persons who have demonstrated language proficiency at an expert level, the language proficiency shall be re-assessed every:
  - (1) four years from the date of the assessment, if the level demonstrated is operational level;
  - (2) six years from the date of the assessment, if the level demonstrated is extended level.
- (g) The demonstration of language proficiency shall be done through a method of assessment, which shall contain:

- (1) the process by which an assessment is done;
- (2) the qualifications of the assessors conducting assessments of language proficiency;
- (3) the appeal procedure.
- (h) The operator of the aerodrome may issue an authorisation to a person employed by the GHSP who has not demonstrated compliance with point (a) until:
  - (1) dd/mm/yyyy (6 years from the date of application of this regulation) for the English language;
  - (2) dd/mm/yyyy (3 years from the date of application of this regulation) for any language other than the English language.

#### Rationale

This rule is drafted in a similar way to ADR.OPS.B.029.

Further changes may be necessary.

# GH.OPS.020 Supervision of ground handling activities provided to an aircraft operator

- (a) This requirement shall apply to a GHSP when providing this service as a contracted activity to an aircraft operator.
- (b) When this function is combined with other compatible functions, all those functions shall be clearly identified and any overlapping of functions shall be addressed.
- (c) The persons assigned for this function shall have completed the relevant training for the ground supervision activity as per ORGH.TRG.xxx and shall be competent to provide this service.
- (d) When providing this service, the GHSP shall detail the tasks of the function of supervision of GH activities in its Ground handling service manual.

# SECTION 1 – PASSENGER HANDLING AND BAGGAGE ACCEPTANCE

## GH.OPS.100 Passenger handling

- (a) The passenger handling shall be conducted in a way that ensures safe transport of passengers boarded on and disembarked from an aircraft and minimise the risk of injuries.
- (b) The GHSP shall define the duties and tasks related to passenger handling and assign competent personnel to complete those duties and tasks as per the required standards.
- (c) Passenger handling procedures shall cover the following main phases to mitigate the safety risks related to this activity:
  - (1) Check-in, including passenger and baggage acceptance,
  - (2) Gate activities and boarding, and
  - (3) Disembarkation and arrival activities, including, if applicable, handling of transit and transfer passengers.
- (d) The requirements on transporting dangerous goods shall be applied as per ICAO Annex 18 and the Technical instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284).
- (e) The final number of boarded passengers and checked baggage weights for each flight shall be correctly recorded in the system for load planning purposes and transmitted to the aircrew of each respective flight.

## AMC1 GH.OPS.100 Passenger handling

#### HANDLING OF PASSENGERS WITH DISABILITIES

The procedures for handling of passengers with disabilities (PWD) should cover the following aspects:

- (a) The personnel are appropriately trained and qualified to deal with PWD;
- (b) Avoid overloading one individual with handling of both the PWD and their baggage;
- (c) the passenger boarding bridge is not obstructed during boarding/deplaning because of massed carry-on baggage and queueing wheelchairs;
- (d) the suitable equipment is used and the personnel operating it are properly trained;
- (e) PWD should be handled and escorted always by qualified and trained service personnel. They may not be left alone or in the sole company of their accompanying persons, especially during the boarding operations. This can be achieved by using an ambulift or other type of vehicle that grants the comfort and safety of the passenger and their escorts.

## GH.OPS.105 Baggage acceptance – general

- (a) The baggage acceptance shall be conducted in a way that ensures safe transport of passengers' property and minimise the risk of injuries to persons and damage to the aircraft throughout all phases of this activity.
- (b) The GHSP shall define the duties and tasks related to baggage acceptance and assign competent personnel to complete those duties and tasks as per the required standards.
- (c) The procedures for baggage acceptance and handling shall cover the following main safety objectives, as applicable depending on the type of operation:
  - (1) The types of baggage. They shall include, as a minimum, the following categories:
    - (i) Cabin baggage,
    - (ii) Checked baggage,
    - (iii) Special baggage.
  - (2) The requirements on transporting dangerous goods in passenger baggage shall be applied as per the ICAO Technical instructions for the Safe Transport of Dangerous Goods by Air.
  - (3) The final number of pieces, the actual or standard weight of checked baggage, and their location as per the Load Instruction Report shall be correctly recorded in the system for load control purposes or handed over to the flight crew when the loadsheet is arranged by them.
  - (4) The baggage weighing method shall be documented in the GHSP's and aircraft operator's procedures.
  - (5) Transfer baggage shall be processed in accordance with the aircraft operator's procedure and shall observe the security and aerodrome procedures applicable at each aerodrome.

## GH.OPS.110 Baggage tagging

When baggage tagging is applied, the GHSP shall ensure that:

- (a) Every piece of checked baggage shall be tagged for easy identification and tracking upon baggage acceptance.
- (b) The baggage tagging shall consider the type of baggage and its specificity.

## AMC1 GH.OPS.110 Baggage tagging

#### **BAGGAGE TAGGING**

The following steps should be covered by the baggage tagging procedure:

- (a) Issuance of baggage tag for checked baggage, containing a unique baggage number, the passenger's name, flight number;
- (b) Baggage tags are clearly readable or legible, regardless of the method of issuance;

- (c) Additional information necessary for the safe handling and transport of the baggage is made visible on the baggage, either on the regular tag or by additional tags, stickers or labels;
- (d) The appropriate destination on the baggage tag is indicated in accordance with the aircraft operator procedure.

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# **SECTION 2 – CARGO AND MAIL HANDLING**

## GH.OPS.200 Cargo and mail handling – general

The GHSP shall develop procedures for the safe transport of cargo and mail items. These shall include:

- (a) Cargo bulk loads preparation;
- (b) Airworthiness of ULD checking if it is below or above accepted dimensions, its condition;
- (c) Build up safety and related training- so ensuring export build up is going to maintain flight safety;
- (d) ULD serviceability;
- (e) Weighing process and weight reconciliation between systems.

# GH.OPS.205 Cargo acceptance

The GHSP shall develop and implement a procedure for the cargo acceptance, to ensure that the cargo processing and handling will be performed so as to minimise any safety risk regarding the aircraft and the persons.

# GH.OPS.210 Special cargo

The GHSP shall have procedures for the handling of special cargo or apply the aircraft operator procedures in this sense, as the case may be.

## GM1 GH.OPS.210 Special cargo

#### **CARGO ITEMS**

- (a) The following items can be considered special cargo:
  - (1) Pharmaceutical products,
  - (2) Live animals,
  - (3) Perishable items,
  - (4) Fragile items,
  - (5) Valuable cargo,
  - (6) Diplomatic cargo,
  - (7) Human remains,
  - (8) Large and/or heavy items, such as parts of whole automobiles, train cars, aircraft parts, etc.,

(9) Any other items that require special handling and/or transport.

# GH.OPS.215 Special cargo – dangerous goods

- (a) The handling and transport of dangerous goods shall comply with ICAO Annex 18 and Doc 9284 Technical Instructions for the Safe Transport of Dangerous Goods by Air.
- (b) The GHSP shall ensure that the personnel involved in the handling of dangerous goods shall be trained and competent to perform the assigned tasks.

# **SECTION 3 – RAMP ACTIVITIES**

## **GH.OPS.300** General considerations on ramp activities

- (a) The GHSP shall develop procedures for the safe ramp activities, to ensure that the risk of damage to the aircraft, equipment and vehicles on the ramp and injuries to personnel and passengers is minimised.
- (b) The ramp activities shall be performed in accordance with the aircraft operator procedures. When these are not provided by the aircraft operator, the GHSP shall apply its own procedures specific to the aircraft type.

## GH.OPS.305 Ramp safety

(a) Working, walking and driving on the airside

The GHSP shall ensure that its personnel are trained and aware of working, walking and driving on the aerodrome airside areas.

(b) Foreign object debris (FOD)

The GHSP shall comply with the applicable requirements related to FOD as stated in Regulation (EU) 139/2014, particularly ADR.OPS.B.016.

(c) Aircraft danger areas

The danger areas around the aircraft engine intake areas, propeller rotation areas, and exhaust areas shall be kept clear of persons and vehicles while engines are running.

There shall be no persons walking or approaching the engine ingestion and blast areas when the engines are about to be started or are running.

Persons shall be forbidden to approach the aircraft when the anti-collision lights are on.

Additionally, the provisions of ADR.OPS.D.055 related to jest blast precautions shall be observed.

Walking and driving under the aircraft fuselage shall be avoided.

(d) Adverse weather conditions

The GHSP shall develop procedures to operate in adverse weather conditions, in cooperation with the aerodrome operator, air traffic services, aircraft operators and any other relevant parties operating at the aerodrome, as required by Regulation (EU) 139/2014, ADR.OPS.B.050.

(e) Personal protection equipment

The GHSP shall ensure that its personnel performing activities on the apron are wearing adequate personal protection equipment.

## AMC1 GH.OPS.305(d) Ramp safety

#### PROCEDURES FOR ADVERSE WEATHER CONDITIONS

These procedures should cover at least the following situations:

- (1) Slippery apron conditions,
- (2) Storms-lightning,
- (3) High winds,
- (4) Low visibility,
- (5) Sandstorm,
- (6) Intense heat,
- (7) Freezing conditions.

### GH.OPS.310 Coordination of turnaround activities

- (a) If the turnaround coordination is required by the aircraft operator, the GHSP and the aircraft operator shall agree on the means to ensure safe coordination of turnaround activities to minimise the risk of damage to the aircraft, other vehicles on the ground and injuries to persons and to avoid any duplications of the same procedures.
- (b) The GHSP shall have a written procedure to describe the following aspects:
  - (1) elements that need to be observed;
  - (2) whether this activity is performed by a person or an automated device;
  - (3) who is responsible for this activity;
  - (4) tasks associated to this function;
  - (5) ensure that the amount of tasks per person does not jeopardise the safety of activities;
  - (6) the procedure is disseminated to all the persons involved.
- (c) The turnaround procedure applied to each aircraft shall observe the aircraft type and aircraft limitations.
- (d) The GHSP shall observe the requirement to alert the aerodrome emergency services as per ADR.OPS.D.050.

#### Rationale

Turnaround coordination requires planning. However, the rule should provide enough flexibility for the aircraft operator and the GHSP that provide services to an aircraft to decide how this coordination will take place, especially in the case when an aircraft is serviced by more than one GHS. The turnaround coordination activity should not be mandatory for a GHSP that provides only some but not all of the turnaround services.

An aircraft may be serviced by more than one GHSP during turnaround; ground handling services could be much fragmented per different service providers. For example, the following services could be provided by several individual GHSPs: fuelling, baggage and cargo loading and unloading, toilet and water services, handling of catering, passenger handling, etc. Therefore, it is of utmost importance that all activities taking place during turnaround are well planned and coordinated to minimise the risk of damage to the aircraft, other vehicles and injuries to persons providing those services, but also to ensure on-time servicing to reduce any delays.

Today, turnaround coordination is an activity that may or may not be requested by the aircraft operator through its service level agreement with its GHSPs. However, the safety of these activities needs to be ensured at all times. The GHSP and the aircraft operator may decide how they plan to ensure this service.

## AMC1 GH.OPS.310 Coordination of turnaround activities

#### GENERAL

- (a) The turnaround activities may be coordinated by one or more persons or by means of artificial intelligence.
- (b) If more than one GHSP is providing services during turnaround to an aircraft operator, the aircraft operator should decide which of the GHSP involved has been assigned with the responsibility for the coordination of all the GH activities during turnaround.

#### Rationale:

The request to have a turnaround coordinator is the aircraft operator's choice and it is specified in its procedures for aircraft handling. On the other hand, an aircraft operator might ask itself whether it would be comfortable without a coordination of the turnaround activities or if it has put other processes in place to mitigate the potential risks.

## GH.OPS.315 Aircraft arrival

- (a) The GHSP shall develop and implement the procedures for the aircraft arrival so as to minimise the risk of damage to the aircraft and injuries to persons during aircraft arrival at a stand.
- (b) Manoeuvring of the arriving aircraft to the stand, support for parking and docking shall be under the responsibility of the provider of apron management services and implemented in accordance with the requirements of Subpart D of Annex IV — ADR.OPS to Regulation (EU) 139/2014.
- (c) When activities related to support for parking at the stand and docking are performed by the GHSP, it shall observe the applicable requirements of Regulation (EU) 139/2014 related to the apron management services, including the specific training of the personnel responsible for these tasks.
- (d) The GHSP shall implement the aircraft operator procedures for the following activities upon aircraft arrival. When these procedures are not provided, the GHSP shall apply its own operational procedures, which shall comply with the specifics of the aircraft type:
  - (1) Securing of aircraft on the ground using chocks,
  - (2) Operation of cargo hold doors and service panels,
  - (3) Positioning of the GSE, including the ground power unit and pre-conditioned air unit if applicable,

- (4) If applicable, operation of passenger boarding bridges or passenger boarding stairs. The aerodrome operator procedure shall apply if it provides this equipment,
- (5) Post-arrival damage check.

## AMC1 GH.OPS.315 Aircraft arrival

#### **INSPECTION OF PARKING STAND**

The GHSP should perform an inspection of the assigned parking stand prior to aircraft arrival. This inspection should check the following:

- (a) FOD,
- (b) Stand surface conditions,
- (c) Stand free of GSE and personnel.

## GH.OPS.320 Aircraft securing on the ground

The GHSP shall develop procedures to ensure that the aircraft is secured against any unintended movement while being on the ground.

## GH.OPS.325 Aircraft loading and unloading

- (a) The GHSP shall develop procedures for aircraft loading and unloading to include the following elements:
  - (1) the aircraft load is within the structural and operational limits and the aircraft CG is observed,
  - (2) the aircraft is correctly loaded, in accordance with the loading instructions, and any loading specifications and requirements related to dangerous goods and to other special cargo, mail or baggage items are observed,
  - (3) the aircraft unloading is performed in accordance with the unloading instructions issued prior to the aircraft arrival and the aircraft stability is ensured during unloading and passenger disembarking,
  - (4) the load is properly secured to prevent any movement during flight or damage to other items in the cargo compartment, the aircraft, and its occupants, the risk of damage to the aircraft and personnel during arrival at a stand is minimised.

## AMC1 GH.OPS.325 Aircraft loading and unloading

#### MITIGATIONS

#### General mitigations

- (a) The personnel responsible for these tasks are trained and competent.
- (b) Designation of a loading supervisor

#### Mitigations for unloading

- (c) Procedures for loading/unloading to ensure the ground stability of aircraft
- (d) After unloading, final check on the cargo holds for damages, leaks and left items

In-plane loading

- (e) ULD appropriate to the type of the aircraft
- (f) ULDs loading in a manner not to damage cargo hold doors or cargo hold
- (g) Procedure to notify damages or malfunctions to the in-plane loading system and of the entire aircraft
- (h) Check load against cargo / baggage manifest, if available

## GH.OPS.330 Loading supervision

- (a) The GHSP shall supervise the aircraft loading and unloading at the apron, in order to:
  - (1) Monitor the unload and document it in case of deviations from the loading instructions.
  - (2) Confirm the transit load location, ULDs and bulk load are in accordance with the Transit Load information received from the loading station and report any variance to Load Control for the onward flight and the aircraft operator.
  - (3) Confirm loading is carried out as specified by the final Load Instruction Report (LIR).
  - (4) Report to Load Control the person responsible for loadsheet preparation any deviation from planned load or loading and any special, overweight or non-standard items presented for loading not already included in the LIR.
  - (5) Communicate final loading figures, including the last-minute changes (LMC), to Load Control.
- (b) The GHSP shall ensure that the personnel performing the aircraft loading are trained and competent to perform the tasks per the required standards.

## GH.OPS.335 Baggage handling

(a) Baggage handling shall be conducted in a way that ensures safe transport of passengers' property and minimise the risk of injuries to persons and damage to the aircraft baggage and any loading equipment or vehicles throughout all phases of this process.

(b) The GHSP shall define the duties and tasks related to baggage handling and assign competent personnel to complete those duties and tasks as per the required standards.

#### Baggage sorting

(c) When baggage sorting is applied, it shall be performed taking into account the operational context including but not limiting to the aircraft operator's procedure, the system used, and the aerodrome facilities.

#### Baggage loading and unloading

- (d) The loading of baggage shall be performed in accordance with the loading instructions provided by Load Control.
- (e) The aircraft hold shall be checked to ensure it is empty prior to loading.
- (f) When unit load devices (ULD) are used for baggage loading, the GHSP shall ensure that those ULD are within the acceptable limits established according to the manufacturer instructions and empty before use.
- (g) Any last-minute changes related to baggage loading such as addition or removal of any checked baggage shall be transmitted to Load Control.
- (h) Once the unloading is complete, the person in charge shall check the cargo compartment(s) to ensure all items have been unloaded.
- (i) Loading and unloading shall be executed with the correct GSE for the aircraft type and task.

## GH.OPS.340 Loading and unloading of dangerous goods

- (a) The GHSP shall ensure that the dangerous goods are handled in accordance with the ICAO Annex 18 and the Technical Instructions for the safe transport of dangerous goods by air (Doc 9284).
- (b) The GH personnel involved in the transport of dangerous goods shall be trained in accordance with the Technical Instructions and shall be competent to perform the tasks as per the required standards.

## AMC1 GH.OPS.340 Loading and unloading of dangerous goods

#### MITIGATIONS

The procedures for the safe transport of dangerous goods should comply with the ICAO Technical Instructions.

- (a) Procedures for aircraft loading/unloading
  - (1) Prevention of damage to packages, ULD
  - (2) Consolidation to comply with the ICAO Technical Instructions
  - (3) Separation and segregation of packages to prevent interaction between incompatible DG
  - (4) Prevention of movement during ground transport and during flight

- (5) Prevention of shipments labelled CAO (cargo aircraft only) from being loaded on passenger aircraft.
- (b) Procedures for damaged or leaking packages
  - (1) Not to be loaded into an aircraft
  - (2) Unloaded from the aircraft, if already loaded following DG procedures
  - (3) In case of leakage, check for other contaminated packages and assess if they can be transported
  - (4) Apply any additional procedures, including reporting, of the aircraft operator and aerodrome operator, as the case may be.
  - (5) Procedure for the NOTOC delivery to the commander/PIC.

## GH.OPS.345 Special loading

Placeholder

## **GH.OPS.350** Aircraft departure activities

- (a) The aircraft departure procedures shall ensure that the risk of damage to an aircraft and other vehicles and injuries to persons during departure from the stand is minimised.
- (b) Manoeuvring of the departing aircraft from the stand shall be under the responsibility of the provider of apron management services and implemented in accordance with the requirements of Subpart D of Annex IV ADR.OPS to Regulation (EU) 139/2014.
- (c) The GHSP shall coordinate the aircraft departure with the other organisations involved in this activity.

## AMC1 GH.OPS.350 Aircraft departure activities

- (a) Safety risk mitigations for pre-departure activities
  - (1) Pre-departure check of the aircraft and the stand
  - (2) Correct pushback equipment for aircraft type and other conditions
- (b) Departure activities
  - (1) Application of the aerodrome requirements of ADR.OPS.D.040 'Aircraft departure from the stand'.
  - (2) Communication including phraseology / standard hand signals between flight crew and the person responsible for the departure operation
  - (3) Engine start sequence agreed and followed

- (4) Pushback or towing procedures: includes correct pushback or towing equipment for aircraft type and other conditions.
- (c) General mitigation
  - (1) Responsible personnel are trained and competent to perform the assigned tasks.

## **GM1 GH.OPS.350(b)** Aircraft departure activities

Other organisations involved in the activities preparing the aircraft departure from the stand can be the aerodrome operator, the air traffic service provider, or the provider of apron management services.

The apron management services are responsible for coordinating the radio communication with the ATC for parking, taxiing, pushback, but not with the actual execution of the pushback service. Marshalling services – regardless of who is doing them, will comply with Regulation (EU) 139/2014 as regards the training and with the hand-signs and communications from Regulation (EU) 923/2012.

#### Rationale

*Flexibility to adjust procedures whenever necessary, so that different types and sizes of operators can develop adequate procedures.* 

## GH.OPS.355 Pushback and towing

- (a) Pushback and towing procedures specified by the aircraft operator, where these exist, shall be conducted in accordance with established aviation standards and procedures.
- (b) The GHSP shall develop procedures for the pushback and towing operations in accordance with established aviation standards and implement those procedures when they are not provided by the aircraft operator. These shall cover, as a minimum:
  - (1) how to connect pushback vehicle and towbar;
  - (2) in case of towbarless pushback, how to connect the towbarless vehicle;
  - (3) preparing the aircraft for towing;
  - (4) alert flight crew of the loss of communications during pushback/towing.
- (c) The GHSP shall apply the aerodrome procedures established by the aerodrome operator in accordance with the provisions in ADR.OPS.B.028 of Regulation (EU) 139/2014 in relation to aircraft ground movements, namely:
  - (1) designated routes to be used during aircraft towing operations;
  - (2) adequate and appropriate guidance;
  - aircraft display lights during towing operations in accordance with point SERA.3215 of Reg. (EU) 923/2012;
  - (4) communication and coordination between the GHSP, the apron management services unit, and the air traffic services unit, as appropriate;

- (5) towing operations in adverse weather or meteorological conditions.
- (d) The GHSP shall ensure that the personnel involved in the aircraft pushback and towing manoeuvres are trained and competent to perform the tasks as per the required standards.

The content of point (c) has been moved from CAT.OP.MPA.205. It is intended to delete the requirement on aeroplane towing from Regulation (EU) 965/2012 and keep it only in this regulation. Instead, Reg. (EU) 965/2012 will contain only a reference to this requirement.

## AMC1 GH.OPS.355 Pushback and towing

#### **TOWBARLESS TOWING**

- (a) Towbarless towing should be based on the applicable SAE ARP (Aerospace Recommended Practices), i.e. 4852B/4853B/5283/5284/5285 (as amended).
- (b) Pre- or post-taxi positioning of the aeroplanes should only be executed by towbarless towing if one of the following conditions are met:
  - an aeroplane is protected by its own design from damage to the nose wheel steering system;
  - (2) notification is provided to alert the flight crew that damage referred to in (b)(1) may have or has occurred;
  - (3) the towing vehicle is designed to prevent damage to the aeroplane type; or
  - (4) the aeroplane manufacturer has published procedures and these are included in the operations manual.

#### Rationale

This AMC has been moved from Reg. (EU) 965/2012 here. AMC CAT.OP.MPA.205 will be deleted.

## GH.OPS.360 Communication and phraseology

- (a) The communication between the flight crew and the ground person responsible for the aircraft pushback shall ensure safe operation of the aircraft and its occupants and of the persons and vehicles on the ground.
- (a) The cockpit ground communication for engine start-up and push-back shall use the phraseology as specified in Regulation (EU) No 923/2012, Section 14 Voice communication procedures, Appendix 1 to AMC1 SERA.14001 General, points 5.1.1 and 5.1.2 as follows:

#### Ground crew/flight crew phraseologies

Starting procedures

Ground crew:	Pilot:
a) [are you] READY TO START UP? —>	b) STARTING NUMBER (engine number(s)).

Note 1. The ground crew should follow this exchange by either a reply on the intercom or a distinct visual signal to indicate that all is clear and that the start-up as indicated may proceed.

Note 2. Unambiguous identification of the parties concerned is essential in any communications between ground crew and pilots.

Pushback procedures

Ground crew:	Pilot:
a) [are you] READY FOR PUSHBACK? —>	b) READY FOR PUSHBACK.
c) CONFIRM BRAKES RELEASED>	d) BRAKES RELEASED.
e) COMMENCING PUSHBACK.	-
f) PUSHBACK COMPLETED>	g) STOP PUSHBACK.
h) CONFIRM BRAKES SET>	i) BRAKES SET,
	j) DISCONNECT.
k) DISCONNECTING STAND BY FOR VISUAL AT YOUR LEFT (or RIGHT).	

Note.— This exchange is followed by a visual signal to the pilot to indicate that disconnect is completed and all is clear for taxiing.

#### Rationale

The communication phraseology for push-back between the cockpit and ground crew is included in Regulation (EU) No 923/2012, Section 14 Voice communication procedures, Appendix 1 to AMC1 SERA.14001 General.

Although at AMC level in Regulation (EU) 923/2012, EASA has been notified that the phraseology is not followed as indicated and this makes the push-back coordination rather difficult when a GHSP communicates in different ways for the same service throughout a day of operation. The safety of manoeuvring is jeopardised by not respecting the correct phraseology.

To enhance the importance of using a standard phraseology the content of the above-mentioned Appendix regarding the push-back service has been copied at implementing rule level in this draft regulation.

# **SECTION 4 – AIRCRAFT SERVICING**

## GH.OPS.400 Aircraft handling – general

- (a) This section includes the following ground handling services:
  - (1) Aircraft servicing fuelling
  - (2) Aircraft servicing potable water, toilet servicing, aircraft cleaning
  - (3) Aircraft servicing de-icing and anti-icing.
- (b) The aircraft servicing activities shall be conducted in a way that the risk of damage to the aircraft and injuries to personnel and passengers is minimised.
- (c) The GH services shall be performed in accordance with the aircraft operator procedures. When these are not provided by the aircraft operator, the GHSP shall apply its own procedures specific to the aircraft type.

## GH.OPS.405 Aircraft refuelling and defueling – general

- (a) The GHSP shall ensure that the personnel involved in fuelling operations are trained and competent to perform the assigned tasks as per the required standards.
- (b) The fuelling and defueling services may be provided by an organisation different from the GHSP responsible for other GH services. This organisation is called an into-plane service provider. In such case, the GHSP shall identify in its procedures the responsibilities of both organisations and ensure that they are communicated to the fuelling/defueling service provider.
- (c) The GHSP shall ensure that the procedures for aircraft refuelling cover, as a minimum, the following basic safety precautions:
  - observing the refuelling zones as established by the aerodrome operator and according to the aircraft type and preventing any passengers or unauthorised persons to enter those zones;
  - (2) keeping fuelling vents clear during refuelling/defueling.
  - (3) prohibition to use any portable electronic devices within the refuelling zones;
  - (4) prohibition of open flames and the use of electrical or electronic devices or tools likely to produce sparks or arcs within the refuelling zones;
  - (5) prohibition to start ground power units during refuelling; do not switch off or disconnect the GPU before fuelling is completed;
  - (6) ensuring an unobstructed path from the aircraft to allow quick removal of fuelling vehicles and persons in case of emergency;
  - (7) correct positioning of the fuelling vehicle relative to the aircraft wings and other surfaces bearing down on the vehicle while aircraft settling under increased fuel load;

- (8) correct bonding of aircraft and fuel supply sources and the correct application of earthing procedures;
- (9) immediate notification of the fuelling supervisor in case of fuel spillage and detailed instructions on how to handle fuel spillage;
- (10) positioning the ground support equipment so that the designated emergency exits are free of any obstruction to allow expeditious evacuation of the passengers, if passengers are embarking or disembarking or remain in the aircraft during refuelling;
- (11) ensuring unobstructed access to the fuel hydrant and the stop emergency;
- (12) discontinuing refuelling operations if electrical thunderstorms are at or in the vicinity of the aerodrome.
- (d) The GHSP shall ensure that the fuel quality is compliant with the applicable industry standards for fuel supply and is free from any contaminants.
- (e) The GHSP shall use only the fuel type approved for the aircraft type in accordance with the aircraft operator's instructions and misfuelling is prevented.
- (f) For procedures for refuelling/defueling with passengers on board, embarking or disembarking, the GHSP shall comply with the relevant requirements of Regulation (EU) No 965/2012 and the aerodrome operator procedures, if in place. The GHSP shall ensure that the designated emergency exits and escape routes are kept free of obstacles and the passenger boarding bridges or passenger stairs are clear of any FOD to ensure swift evacuation of passengers and crews in case of an emergency.
- (g) For special refuelling/defueling, the GHSP shall comply with the following:
  - (1) the instructions of the aircraft manufacturer as provided by the aircraft operator,
  - (2) the specific requirements of in Regulation (EU) 965/2012,
  - (3) the instructions of the aerodrome operator,
  - (4) the instructions of the fuelling provider.
- (h) The GHSP shall develop specific procedures for helicopter refuelling and shall observe the aircraft operator's specific procedures.
- (i) The requirements regarding fire prevention and extinction on the apron and at the parking stands shall be observed at all times.

#### Rationale

The majority of the content of this rule has been taken over from ADR.OPS.D.060.

The fuelling requirements of Regulation (EU) No 965/2012 are mainly in CAT.OP.MPA.195, CAT.OP.MPA.200 and related AMC and the equivalent requirements in Annexes VI (NCC), VII (NCO) and VIII (SPO).

Defueling for helicopters is forbidden as per Reg. (EU) 965/2012.

## **GM1 GH.OPS.405** Aircraft refuelling and defueling

#### RECOMMENDED GUIDANCE FOR REFUELLING AND DEFUELLING

The ICAO Doc 9977 'Manual on Civil Aviation Jet Fuel Supply' could be used for further reference.

The GHSP may use also the standards and instructions put forward under the Joint Inspection Group (JIG) in relation to the aviation fuel supply standards.

## GM1 GH.OPS.405(f) Aircraft refuelling and defueling

#### SPECIAL REFUELLING OR DEFUELING AS PER COMMISSION REGULATION (EU) 965/2012

- (a) Special refuelling or defueling may be performed only if the aircraft operator:
  - (1) has performed a risk assessment;
  - (2) has developed procedures; and
  - (3) has established a training programme for the personnel involved in such operations.
- (b) Special refuelling or defueling applies to:
  - (1) refuelling with an engine running or rotors turning;
  - (2) refuelling/defueling with passengers embarking, on board, or disembarking; and
  - (3) refuelling/defueling with wide-cut fuel.

More elements to be added, outside R. (EU) 965/2012.

## GH.OPS.410 Fuel depots and hydrants

Placeholder

<mark>To be developed.</mark>

## GH.OPS.415 placeholder for alternative energy sources of propulsion

#### (a) Aircraft using hydrogen propulsion

- (b) The air operator, the GHSP and the aerodrome operator shall conduct a common safety risk assessment process to identify the risks associated with the operation of aircraft using hydrogen-propulsion engines.
- (c) The safety risk assessment shall also include other necessary elements such as, but not limited to:
  - (1) Any ground support equipment or vehicles required for refuelling,
  - (2) Impact on the environment,

- (3) Impact on other GH activities running around the aircraft and on the aerodrome,
- (4) Measures to mitigate the risk of refuelling operations with hydrogen.

Electric propulsion - Any special needs?

## AMC or GM Alternative energy sources for propulsion

Elements specific to the type of fuel used as a propulsion energy source should be considered in the risk assessment. Such elements could be:

- (a) additional infrastructure for carrying the 'fuel' from the storage area to the aircraft (e.g. underground pipeline system),
- (b) necessary dispensers,
- (c) fuelling vehicles,
- (d) ...

## **GH.OPS.420** Potable water servicing

- (a) The GHSP shall comply with the aircraft operator's procedure for this service. In the absence of such procedure from the aircraft operator, the GHSP shall apply its own operational procedure for the potable water servicing.
- (b) The GHSP shall ensure the following:
  - (1) mandatory protective gear such as gloves, eye wear, face protection, overalls for the personnel responsible for this service;
  - (2) the personnel are properly trained to perform the assigned tasks;
  - (3) the equipment used for this service is functional and is maintained in accordance with the established maintenance programme.

## GH.OPS.425 Toilet servicing

- (a) The GHSP shall comply with the aircraft operator's procedure for this service. In the absence of such procedure from the aircraft operator, the GHSP shall apply its own operational procedure for the toilet servicing.
- (b) The GHSP shall ensure the following:
  - (1) mandatory protective gear such as gloves, eye wear, face protection, overalls for the personnel responsible for this service;
  - (2) the personnel are properly trained to perform the assigned tasks;
  - (3) the equipment used for this service is functional and is maintained in accordance with the established maintenance programme.

## GH.OPS.430 Aircraft cleaning (exterior, interior)

- (a) The GHSP shall comply with the aircraft operator's procedure for this service. In the absence of such procedure from the aircraft operator, the GHSP shall apply its own operational procedure for the aircraft cleaning.
- (b) The GHSP shall ensure the following:
  - (1) mandatory protective gear such as gloves, eye wear, face protection, overalls for the personnel responsible for this service;
  - (2) the personnel are properly trained to perform the assigned tasks;
  - (3) the equipment used for this service is functional and is maintained in accordance with the established maintenance programme;
  - (4) the risk of producing FOD during this activity is properly mitigated in its procedures and training.

## GH.OPS.435 Aircraft de-icing and anti-icing

- (a) The GHSP shall comply with the applicable de-icing and anti-icing requirements of Regulation (EU) 965/2012 on air operations.
- (b) The GHSP shall provide de-icing and anti-icing services in accordance with the aircraft operator's programme and procedures. When the aircraft operator provides no such procedures, it shall perform the de-icing and anti-icing in accordance with its own procedures for the specific aircraft type.
- (c) The clean aircraft concept as per ICAO Doc 9640 shall be observed for any aircraft.
- (d) The GHSP shall apply the SAE standards to the de-icing and anti-icing activities.
- (e) The personnel performing de-icing and anti-icing operations shall be trained in accordance with the SAE standards and competent to perform the de-icing and anti-icing operations as per the required standards.
- (f) The GHSP shall cooperate with the aerodrome operator and any relevant authority and organisation to enable the recovery and recycling of the de-icing and anti-icing fluid for environmental protection purposes.

## GH.OPS.440 Aircraft de-icing and anti-icing

placeholder

# SECTION 5 – OPERATION OF GROUND SUPPORT EQUIPMENT

## **GH.OPS.500** Ground support equipment – general

- (a) The operation of ground support equipment (GSE) shall be performed so as to minimise the risk of injuries to persons and damage to the aircraft, other equipment or vehicles on the ramp or the environment.
- (b) The GHSP shall develop procedures for the operation of the used GSE, with specific safety actions to address the risk for equipment approaching, parking and departing the area where the aircraft is being serviced, including the equipment used for the transport of passengers with disabilities on the ground.
- (c) Driving of GSE shall observe the aerodrome requirements related to driving in Annex IV (ADR.OPS) to Regulation (EU) No 139/2014.
- (d) The GHSP shall comply with the requirements on the maintenance programme of Subpart GSE of Annex III Organisational requirements for GHSP (ORGH.GSE) to this Regulation.
- (e) The GSE shall be operated only by trained and qualified personnel who are competent to operate the GSE as per required standards.

Stakeholders are invited to comment on the need to include the hand signals for GSE guidance in the rule.

# **SECTION 6 – OTHER REQUIREMENTS**

## GH.OPS.610 Handling and storage of unit load devices

#### Handling

The GHSP shall ensure that the unit load devices (ULD) used for baggage and cargo transportation comply with the following requirements:

- (a) ULD are serviceable and not exceeding the allowed serviceability limits. Unserviceable ULD shall be labelled accordingly and taken out of use.
- (b) The ULD are consolidated in compliance with the dangerous goods segregation requirements.
- (c) The baggage items, cargo items or mail items consolidated in a ULD are properly secured and strapped to avoid any movement during handling and transportation on the ground and in the aircraft.

#### Storage

(d) The ULD shall be stored in adequate conditions to prevent any damage or deterioration. Storage on the ground is not permitted.

#### Securing

(e) The ULD shall be properly secured during high winds.

#### Transportation

(f) The ULD shall be transported in a safe way to prevent damages to the ULD and the load and injuries to other personnel or equipment.

## GH.OPS.620 Specific handling requirements for helicopters

Placeholder

## GH.OPS.630 Specific handling requirements for other aircraft

Placeholder for drones (if any GH service is needed) and other types of future certified aircraft