

TITLE:

Aircraft refuelling operations

<i>Document code</i>	<i>E-15-MOV18</i>
<i>Document type</i>	<i>Operating procedure for the movement area</i>

WRITING AND APPROVAL of the document:

WRITTEN BY:	<i>Deputy PH Movement Area</i>	Marco PANETTA	<i>See Italian version</i>
	<i>Flight Control Manager</i>	Paolo MELE	<i>See Italian version</i>
APPROVED BY	<i>PH Movement Area</i>	Marco PELLEGRINO	<i>See Italian version</i>

Version no.:	1
Publication date	19/11/2018
Effective date	01/12/2018

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

Intentionally left blank

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

ROLES and DISTRIBUTION:

Role	Organisation Unit / Company
Compiled by	ISE Operational Safety Manager
	CLD Flight Control Manager
Approved by	Movement area Post Holder
Person responsible for archiving	Movement Area record keeper
Person responsible for the Document	ISE Operational Safety Manager
	CLD Flight Control Manager
Internal stakeholders	<ul style="list-style-type: none"> • Flight Control (CLD) • Operational Safety (ISE) • Station Manager on duty (CSF) • Maintenance of electromechanical systems (MOE) • Training Manager (TRM)
External stakeholders	<ul style="list-style-type: none"> • Apron operators for airside services within the airport: <ul style="list-style-type: none"> ○ Refuelling Handler ○ Ground assistance handler ○ ADR Assistance • Manager of the static unit system for the storage and distribution of aviation fuels at Fiumicino airport. • Airline operators present at Fiumicino airport • National Firefighters Corps: <ul style="list-style-type: none"> ○ Fiumicino Airport Detachment • ADR Assistance
The procedure is available on corporate intranet page: http://leonardo	
The procedure is available on internet page: http://www.adr.it	

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

REFERENCE DOCUMENTS:

DOCUMENT LEVEL	Type	Code (paragraph) and Title
External documents	Mandatory	<ul style="list-style-type: none"> Regulation (EU) no. 139/2014 and associated AMC and GM Regulation (EU) no. 965/2012 and associated AMC and GM Regulation (EU) no. 452/2014 Ministerial Decree 30 June 2011 ADR Assistance: 06_CQ_IOP_04_ADRAs_Elevatori_Ambulift Agreement for the subconcession of state areas to SERAM ADR-Firefighters Corps organisational interface agreement
	Guidelines	<ul style="list-style-type: none"> ICAO Doc 9137 "Airport Service Manual" Part 1 "Rescue and Fire Fighting"- Chapter 16 "Aircraft fuelling practices" ENAC Project Management Note prot. no. 0168076/IOP dated 30/12/2011 "Guidelines for preparing the training course of Apron operating staff". Annexe A of Legislative Decree 18/99
Internal Documents	Mandatory	<ul style="list-style-type: none"> Risk assessment (see HZ.HND.08 - REFUELLING OPERATION) PEA - Airport Emergency Plan E-25-MOV25 Operations in adverse weather conditions E-9-MOV02 Airside inspections E-23-MOV03 Protection of runways during low visibility E-15-GEN01 Safety Provisions
	Guidelines	/

COMPLIANCE WITH EASA 139/2014 REGULATION

TYPE	CODE	TITLE	letters	numbers
IR	ADR.OR.D.010	Contracted activities	a)	
			b)	
AMC1	ADR.OR.D.010	Contracted activities	a)	
			b)	
IR	ADR.OR.D.025	Coordination with other relevant organisations	a)	
IR	ADR.OR.E.005	Aerodrome manual	a)	
			l)	5)
AMC3	ADR.OR.E.005	Aerodrome manual	a)	15.2

Table 1 Compliance matrix

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

REVISION REGISTER

Revision	Date	Section and Chapter revised	Page	Summary description of the revision
0	05/12/2016	Complete revision of the document	/	Complete revision of the procedure according to Regulation (EU) 139/14
1	19/11/2018	Complete revision of the document	/	<ul style="list-style-type: none"> • Addition of references to annexe 4; • Complete revision following internal audit FCO-A-21-17 and ENAC audit - Team monitoring the certification dated 23-24/05/2017; • Updating the procedure to the new template set out by Mda Appendix A-0-A01; • Updating AEP contents

Table 2 Revisions

All the amendments and newly added parts must be highlighted with a sidebar like the one beside this part of the text.

All temporary amendments are highlighted with a red double side bar as the one beside this part of the text, and are highlighted in yellow

The parts removed or rearranged are indicated with strike-through text: ~~Abcdefg~~.

The added parts are highlighted in grey **Abcdefg**.

Summary

1. Purpose	7
2. Applicability.....	7
3. Acronyms and Definitions	7
4. Process interface	8
5. Flow chart.....	8
6. Aircraft refuelling procedure	9
6.1. General principles	9
6.1.2 Further principles for refuelling operations with passengers on board	9
6.2. Conditions for failure to start/suspension of aircraft refuelling operations	11
6.2.2 Further conditions for failure to start/suspension of aircraft refuelling operations with passengers on board.....	12
7. Emergency procedures related to refuelling operations	13
7.1. Spill	13
7.1.2 Small Spill.....	13
7.1.3 Big Spill.....	14
7.2. Onset of fire during refuelling operations	15
7.3. Activation of the PEA-aircraft alert status if radio contact with TWR fails.	16
8. Defueling.....	17
9. Infrastructures, equipment and software.....	17
9.1. Infrastructures.....	17
9.1.1 Fuel distribution network.....	17
9.2. Equipment.....	17
9.3. Software.....	18
9.3.1 GRAMS (Ground Activity Monitoring System).....	18
10. Human resources (roles and expertise matrix).....	18
10.1. Personnel training	18
11. Monitoring and measuring methods	18
12. Contracted activities.....	19
13. Record Keeping.....	19
14. List of Forms, Appendices and Annexes	19

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

1. Purpose

The procedure sets out the precautions that must be followed during aircraft refuelling operations, with or without passengers on board, or while passengers are embarking or disembarking.

2. Applicability

The procedure applies to the following operations:

- Aircraft refuelling
- Aircraft refuelling with passengers on board or boarding/disembarking
- Defueling

3. Acronyms and Definitions

- **CEA:** Airside Emergencies Coordination. It is composed by organisational functions OAP/CLD+OPF/CSF.
- **GRAMS** (Ground Activity Monitoring System): software used at ADR through which the activity at each aircraft stand is monitored.
- **HRS (Hydrant Refuelling System):** Fixed system for the distribution of fuel transferred to the aircraft via a dispenser. The system is considered from the delivery valve to which the dispenser attaches, up to the valve connecting to the pipelines.
- **Refueller tanker:** tanker fitted with a tank and the equipment required for refuelling operations.
- **Dispenser:** Tanker used to transfer fuel from HRS wells to the aircraft.
- **Small fuel spill:** non-hazardous fuel spill, due to its size and position, and to environmental and aircraft conditions. Such spill does not constitute a safety hazard and does not require emergency evacuation /disembarking the aircraft.
- **Big fuel spill:** hazardous fuel spill, due to its size and position, and to environmental and aircraft conditions. Such spill constitutes a safety hazard and requires emergency evacuation /disembarking the aircraft.
- **Refuelling Handler:** Company that performs the into-plane aircraft refuelling service, with ENAC certification as fuel assistance service provider CAT.7 of annexe A of Legislative Decree 18/99.
- **Airline Operator:** Commercial air transport company, with a current Airline Operator Certificate (AOC).
- **Refuelling operator:** Personnel trained to perform aircraft refuelling operations.
- **Refuelling operations with passengers on board:** aircraft refuelling operations performed during the presence of passengers on board of the aircraft or of passengers that are boarding / disembarking the aircraft.
- **Refuelling Manager:** Person, identified by the Airline Operator among its staff, that performs coordination and monitoring activities to ensure compliance with refuelling procedures. Only in case of refuelling operations without passengers on board, the Airline Operator and the Refuelling Handler agree that the refuelling supervision is performed by

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

qualified staff belonging to the Refuelling Handler. In such case, the agreement will be complemented by a dedicated procedure detailing the actions to be performed in the event of fire or of a big fuel spill.

- **Safety zone:** Circular area with a radius of 6 m from the aircraft tanks, from outlets, equipment and vehicles used for refuelling and of 3 m from the fuel pit.

4. Process interface

Not applicable

5. Flow chart

Not applicable

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

6. Aircraft refuelling procedure

6.1. General principles

- 6.1.1.1 Refuelling operations take place under the direct responsibility of the Airline Operator, through the designation of a qualified person named "Refuelling Manager".
- 6.1.1.2 The Refuelling Manager's task is to supervise and ensure compliance with the operating procedures described in this document and in the operating manuals of the Airline Operator, therein included the management of any circumstances that might arise. If the Refuelling manager is not the same person as the Captain, the latter must make him/herself known and state his/her role to all airside staff.

6.1.2 Further principles for refuelling operations with passengers on board

- 6.1.2.1 The Airline Operator that intends to perform refuelling operations with passengers on board must produce and send to ADR-CLD Flight control a declaration (MOV18_F01) in which it states:
- 1 To have a dedicated procedure for aircraft refuelling with passengers on board or boarding/disembarking.
 - 2 The procedure in the previous item has been formally approved by the competent National Authority.
 - 3 The Airline Operator is compliant with the safety provisions, as described in Airport Manual Part E-Section 15.
 - 4 It is aware of the National Rules (Ministerial Decree DM 30 June 2011).

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

6.1.2.2 Through the declaration (MOV18_F01) the Airline Operator also guarantees that:

1. The Refuelling Manager is present during refuelling operations with passengers on board.
2. During refuelling operations with passengers on board, all involved Staff is properly trained to emergencies management and is able to handle the equipment made available by Aeroporti di Roma..
3. If the Airline Operator requests the execution of certain activities (e.g. visual contact, check of fire extinguishers, etc.) to a third party (IE. Handler), these activities shall be regulated by a contract/agreement clarifying tasks and responsibilities related to the assigned task, understood that the supervision responsibility is assigned to the Refuelling Manager.

6.1.2.3 Based on Regulation (EU) 452/2014, the requirements in Regulation (EU) 965/2012 apply also to Operators of Third countries that regularly operate at Fiumicino airport.

6.1.2.4 The Airline Operator that intends to perform refuelling with passengers on board must request authorisation to ADR-CLD Flight Control, filling in and sending form MOV18_F02 to address capoareacl@adr.it with the next daily schedule.

6.1.2.5 ADR-CLD Flight Control receives and assesses the request by the Airline Operator. Assessment of the request is performed by taking into consideration the following factors:

- a) position assigned to the flight.
- b) Temporary exclusions at the time of assessment.
- c) Operational and infrastructure limitations of the stand planned.
- d) Planning of simultaneous refuelling in adjacent aircraft stands.

At the end of the assessment, ADR-CLD Flight Control communicates to the Airline Operator the flights for which refuelling with passengers on board is allowed. The list of aircraft stands for which refuelling operations with passengers on board is not allowed is provided in the header of form MOV18_F02.

6.1.2.6 The boarding/disembarking of passengers with reduced mobility by "Ambulift" is allowed on the same side of the aircraft where refuelling operations take place, as long as the following precautions are taken:

- a) The Airline Operator has a procedure in place for the evacuation of passengers and operating staff on board of the aircraft, in the event of an emergency.
- b) ADR Assistance has a procedure in place for the transport and sheltering of passengers and staff on board of the ambulift to a safe zone, in the event of an emergency.

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

6.2. Conditions for failure to start/suspension of aircraft refuelling operations

6.2.1.1 Refuelling operations must not be started and, if already started, must be immediately suspended if one of the conditions listed below occurs:

- a) Absence of Refuelling manager.
- b) Unavailability of the required fire prevention devices.
- c) Non-operating fuel emergency button system in those stands equipped with a fuel dispensing system (unless contingency procedure is shared).
- d) Failure to establish the necessary electrical connections to avoid the generation of electric discharges between vehicles/infrastructures and the aircraft involved in the refuelling operations.
- e) Non affixing the flag highlighting the opening of the pit where the HRS adduction point is located.
- f) Presence of staff not involved in the operations inside the safety zone.
- g) GPU and ACU positioned at a distance shorter than 6m from the infrastructures and vehicles used for refuelling.
- h) Aircraft stand occupied by vehicles not involved in ramp activities.
- i) Vehicles transiting or parked under the wing, with the exception of those used for refuelling and supplying lubricating or hydraulic oil, for the time necessary for the operations.
- j) Tanker engine parked under the wing.
- k) Aircraft engines on.
- l) Refuelling vehicles turned off and not fitted with rapid Start and Stop system.
- m) Equipment for maintenance service parking at less than 3 metres from the vents of the aircraft fuel system.
- n) Presence of works/maintenance operations close to the refuelling zone that might cause sparks or naked flames.
- o) Overheated breaks of the main aircraft landing gear.
- p) Refuelling or maintenance of the aircraft's oxygen supply system.
- q) Presence of fuel vapours inside the aircraft.
- r) Storms with electric discharges on the airport or within 3 Nautical Miles of the Control tower. ADR communicates the suspension of refuelling operations according to operating procedure MdAE_MOV25.
- s) Activation of the PEA (Airport Emergency Plan) for aircraft alert status, involving all Firefighters Corps stations present in the airside. ADR-CEA communicates the suspension of refuelling operations according to the provisions set out in PEA.
- t) The personnel involved in refuelling activities has on him/her or uses a lighter, matches or electronic cigarettes.
- u) The personnel involved in handling activities has on him/her or uses non-ATEX mobile phones/smartphones within the safety area (6m). The personnel involved in the refuelling activities does not wear shoes or clothes with visible metal parts.
- v) The personnel involved in refuelling activities drags stairs or other vehicles with metal wheels or that crawl on the ground if towed.
- w) Installation or removal of aircraft batteries is taking place.
- x) Aircraft GPU and 400Hz cables are being connected/disconnected.
- y) The APU (Auxiliary Power Unit) is being powered on.

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

- z) Vehicles and equipment on the aircraft stand do not allow the emergency vehicles to have free access to the aircraft.
- aa) Vehicles and equipment on the aircraft stand do not allow rapid evacuation of passengers, crew and staff on board of the aircraft through the exits in use.
- bb) The vehicles and equipment on the aircraft stand do not allow the rapid removal of the refuelling vehicles without reversing manoeuvres.

6.2.1.2 In the event the handling personnel operating on the airside become aware of any of the conditions specified in the previous points, they must immediately inform the Refuelling Manager, who suspends the operations and, if appropriate, applies the provisions set out in Chapter 7. Emergency procedures related to refuelling operations.

6.2.1.3 On the aircraft stand, authorisation to resume refuelling operations can be given only by the Refuelling Manager, who must consult with all actors that are taking part in the refuelling operations.

6.2.1.4 The Refuelling Manager must request the Refuelling Operator to interrupt operations in all cases in which ENAV-TWR, Firefighters Corps or ADR-CEA explicitly requests it.

6.2.2 Further conditions for failure to start/suspension of aircraft refuelling operations with passengers on board

6.2.2.1 Aircraft refuelling operations with passengers on board must not be started and, if already started, must be immediately suspended if one of the conditions listed below occurs:

- a) On unauthorised aircraft stands: 207, 208, 209, 210, 801
- b) Maximum number of 20 simultaneous refuelling operations is exceeded. (monitored with GRAMS)
- c) Operations are taking place in two adjacent aircraft stands. (monitored with GRAMS)
- d) Lack of authorisation by the aircraft Captain.
- e) Activation of LVP procedure (Low Visibility Procedure). ADR-CEA communicates the suspension of refuelling operations according to operating procedure MdAE_MOV03.
- f) Refuelling on the left side of the aircraft, unless boarding/disembarking is taking place via a loading-bridge and alternative escape routes are present (e.g. Additional Stairs), set out by the Airline Operator, located on the right side.
- g) Activities associated with loading/unloading of dangerous goods, and/or bulky goods, such their handling does not allow compliance with the precautions.
- h) Presence of obstacles on the pedestrian route and along the emergency exits.

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

7. Emergency procedures related to refuelling operations

7.1. Spill

7.1.1.1 Anyone who detects a fuel spill must immediately inform the Refuelling Manager and the Refuelling Operator.

7.1.1.2 Refuelling Operator:

- Immediately suspends the refuelling;
- Informs the Refuelling Manager;
- Activates the safety measures and enforces the internal procedure.

7.1.1.3 The Refuelling Manager, based on the first information received:

- Assesses the fuel spill (see Paragraph 3 definitions):
 - o In the event of a **SMALL SPILL** it proceeds as per paragraph 7.1.2;
 - o In the event of a **BIG SPILL** it proceeds as per paragraph 7.1.3;

7.1.2 Small Spill

7.1.2.1 The Refuelling Manager:

- Requests ADR-CEA 3022 for intervention by the Firefighters Corps, communicating the following information:
 - o Type of anomaly;
 - o Airline Operator, flight number, aircraft type and brand;
 - o Stand number;
 - o presumed entity of the spill and affected area;
 - o No-hazard of spill;
- Implements the safety provisions set out by the operating procedures of the Airline Operator;
- Authorizes standard assistance operations to be reinstated, as soon as aircraft stand decontamination operations and conformity to standards has been obtained from ADR-ISE operational safety.

7.1.2.2 ADR-CEA, alerted by the Refuelling Manager:

- Informs, through a recorded phone line, the Firefighters Corps operational headquarters, communicating the following information:
 - o Type of anomaly;
 - o Airline Operator, flight number, aircraft type and brand;
 - o Aircraft stand number;
 - o Presumed entity of the spill.
- Coordinates with the ADR-ISE Supervisor for the presence of an ADR-ISE Operator at the aircraft stand to check any eventual evacuation operations and decontamination of the area.

7.1.2.3 The Firefighters Corps-FCO Detachment, alerted by ADR-CEA:

- Implements what set out by the PEA-Infrastructures alert GREY LEVEL;

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

- Intervenes according to its own institutional duties;
- Following the inspection:
 - o it detects a big spill: it will inform the Refuelling Manager and will proceed as provided by the CAP. 7.1.3;
 - o it confirms the small spill, and:
 - proceeds to close the PEA-Infrastructures alert GREY LEVEL;
 - communicates to ADR-CEA the end of the event, authorising the subsequent actions;
 - communicates to the OAP-ISE Operator the end of the operation to verify the area's conformity to standards.

7.1.2.4 The ADR-ISE Operational Safety Operator, based on the instructions received by the ISE-Supervisor:

- Supervises the evacuation and decontamination operations;
- Having received communication by the Firefighters Corps that the operation has been concluded, it verifies and declares the area's conformity to standards, communicating it to ADR-CEA.

7.1.3 Big Spill

7.1.3.1 The Refuelling Manager:

- Requests, through the flight crew member present in the cabin, the PEA- aircraft alert status YELLOW LEVEL contacting ENAV-TWR on the DELIVERY frequency (during the day) or on the GROUND frequency (from 23:00 to 07:00) communicating the following information:
 - o Type of anomaly;
 - o Airline Operator, flight number, aircraft type and brand;
 - o stand number;
 - o Presumed entity of the spill;
- Implements the safety provisions set out by the operating procedures of the Airline Operator.
- Informs the Refuelling Operator of the big spill situation.
- Having received the closure of PEA-aircraft alert status YELLOW LEVEL, authorizes the reinstatement of refuelling operations.

7.1.3.2 Refuelling Operator:

- If refuelling is taking place from HRS supply points on the aircraft stand, activates the emergency button to interrupt the fuel flow in the HRS network and then contacts the number 06 6595 3571. (Reinstatement of the delivery system will take place following visual inspection by SERAM)

7.1.3.3 ENAV-TWR, having been alerted by the Crew or by the Firefighters Corps:

- Implements what set out by the PEA-aircraft alert status YELLOW LEVEL;
- Maintains constant contact with the Firefighters Corps and the Crew (in the case of passengers on board);
- If the Firefighters Corps or the Crew (in the case of passengers on board) declares to raise the aircraft alert to RED LEVEL, ENAV-TWR proceeds as per paragraph 7.2.1.4.

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

7.1.3.4 The Firefighters Corps-FCO Detachment, alerted by ENAV-TWR:

- Implements what set out by the PEA-aircraft alert status YELLOW LEVEL.
- Intervenes according to its own institutional duties.
- Communicates to ADR-CEA the end of the event, authorizing the subsequent actions.
- Communicates to the ADR-ISE Operator the end of the operation to verify the area's conformity to standards.
- Keeps ENAV-TWR and CEA informed about the progress of operations, requesting TWR a possible raising of the aircraft alert status to RED LEVEL. In such case, the Firefighters Corps FCO Detachment proceeds as per paragraph 7.2.1.5.

7.1.3.5 ADR-CEA, having been alerted that the PEA-aircraft alert status has been activated:

- Implements what set out by the PEA-aircraft alert status YELLOW LEVEL.
- Coordinates with the ADR-ISE Operational Safety Supervisor for the presence of an ISE Operator at the aircraft stand to check any eventual evacuation operations and decontamination of the area.
- Keeps in touch with the ISE Operator for updates on the situation.
- If the aircraft alert status is raised to RED LEVEL, proceeds as per paragraph 7.2.1.6.

7.1.3.6 The ADR-ISE Operational Safety Operator, based on the instructions received by the ISE-Supervisor:

- Implements what set out by the PEA-aircraft alert status YELLOW LEVEL.
- Supervises the evacuation and decontamination operations.
- Having received communication by the Firefighters Corps that the operation has been concluded, it verifies and declares the area's conformity to standards, communicating it to ADR-CEA.
- If the aircraft alert status is raised to RED LEVEL, proceeds as per paragraph 7.2.1.7.

7.2. Onset of fire during refuelling operations

7.2.1.1 Anyone who detects an onset of fire must immediately inform the Refuelling Manager and the Refuelling Operator.

7.2.1.2 Refuelling Operator:

- Immediately suspends the refuelling.
- Informs the Refuelling Manager.
- Activates the safety measures and enforces the internal procedure.
- If refuelling is taking place from HRS adduction points on the aircraft stand, activates the emergency button to interrupt the fuel flow of the HRS network and then contacts the number 06 6595 3571. (Reinstatement of the delivery system will take place following visual inspection by SERAM staff)

7.2.1.3 The Refuelling Manager, based on the first information received:

- Requests, through the flight crew member present in the cabin, activation of the PEA-aircraft alert status RED LEVEL contacting ENAV-TWR on the DELIVERY frequency

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

(during the day) or on the GROUND frequency (from 23.00 to 07.00 hrs) communicating the following information:

- Type of anomaly;
 - Airline Operator, flight number, aircraft type and brand;
 - Aircraft stand number;
 - Area where the onset of fire has started and any spill present.
- Implements the safety provisions set out by the operating procedures of the Airline Operator.
 - Having received the closure of PEA-aircraft alert status, authorizes the reinstatement of refuelling operations.

7.2.1.4 ENAV-TWR, having been alerted by the Crew:

- Implements what set out by the PEA-aircraft alert status RED LEVEL.

7.2.1.5 The Firefighters Corps-FCO Detachment, alerted by ENAV-TWR:

- Implements what set out by the PEA-aircraft alert status RED LEVEL.
- Activates the evacuation of the areas of the Terminal that are potentially at risk because adjacent to the zone in which the fire is occurring.
- Coordinates the decontamination operations.

7.2.1.6 ADR-CEA, having been alerted that the PEA-aircraft alert status has been activated:

- Implements what set out by the PEA-aircraft alert status RED LEVEL.
- Coordinates with the ADR-ISE Operational Safety Supervisor for the presence of an ISE Operator at the aircraft stand to check any eventually evacuation operations and decontamination of the area.
- Keeps in touch with the ISE Operator for updates on the situation.

7.2.1.7 The ADR-ISE Operational Safety Operator, based on the instructions received by the ISE-Supervisor:

- Implements what set out by the PEA-aircraft alert status RED LEVEL.
- Supervises the evacuation and decontamination operations.

7.3. Activation of the PEA-aircraft alert status if radio contact with TWR fails.

In the event of refuelling WITHOUT passengers on board, if it is not possible to communicate via radio with the Tower:

7.3.1.1 The Refuelling Manager, based on the first information received:

- Requests activation of the PEA by phoning the Firefighters Corps (tel. 06-6595-4444), specifying:
 - The type of event;
 - Airline Operator, flight number, aircraft type and brand;
 - Aircraft stand number;
 - Presumed entity/ affected area by the event.
- Immediately informs ADR-CEA (number 06-6595-3022), which passes the alert over to ENAV-TWR.

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

8. Defueling

8.1.1.1 Defueling operations are not allowed during boarding/disembarking of passengers or when they are present in the aircraft.

8.1.1.2 For defueling operations, all the precautions stated in chapters 6 and 7 apply.

8.1.1.3 The fuel taken must be stored in an empty tank that will be dedicated to the aircraft and cannot be used until approval is granted by the customs authorities.

This procedure does not discuss the customs aspects associated with defuelling.

9. Infrastructures, equipment and software

9.1. Infrastructures

ADR makes available the following infrastructures and systems to perform aircraft refuelling operations.

9.1.1 Fuel distribution network

9.1.1.1 This is a fuel distribution network with HRS supply points located in the aircraft stand. This network is managed and maintained, on behalf of ADR, by the holder of the state subconcession described in Chapter 12 Contracted activities. Further information is available in Appendix 1 of this procedure.

9.2. Equipment

9.2.1.1 In proximity of the aircraft stands fitted with an HRS supply point there is an emergency button that interrupts passage of fuel in the network. The emergency buttons are highlighted with a sign that makes them easier to be identified. The emergency buttons are managed and maintained, on behalf of ADR, by the holder of the state subconcession described in Chapter 12 Contracted activities.

Further information is available in Appendix 1 of this procedure.

9.2.1.2 All aircraft stands, even those not supplied by the HRS network, are fitted with two mobile fire extinguishers, available to perform a first intervention, whose features are provided below:

- a) One mobile fire extinguisher, containing 50 kg of dry chemical powder with an "A-B1-C" extinguishing capacity, and
- b) a mobile fire extinguisher containing 50 litres of foam with an "A-B4" extinguishing capacity.

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

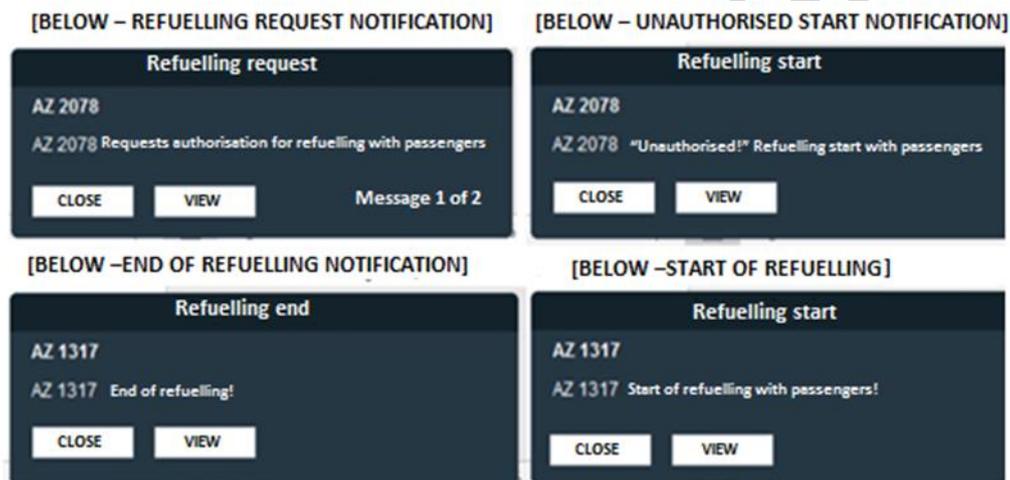
COURTESY TRANSLATION - IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

ADR-OAP-ISE Operational Safety monitors the state of efficiency of the fire extinguishers following the measures set out in procedure MDAE_MOV02.

9.3. Software

9.3.1 GRAMS (Ground Activity Monitoring System)

9.3.1.1 ADR-CLD Flight Control informs the airport headquarters of the Firefighters Corps in real time with regard to refuelling operations with passengers on board, by the GRAMS information system. The system has a graphical interface representing the overview of the aircraft stand and is accessible to the Firefighters Corps Detachment through a workstation in the control room. In the event of failure of the GRAMS software, CLD communicates the planning of aircraft refuelling with passengers on board by emailing the operational room of the Firefighters Corps Airport Detachment.



10. Human resources (roles and expertise matrix)

Not applicable

10.1. Personnel training

10.1.1.1 All subjects involved in aircraft refuelling operations must demonstrate that the personnel that performs the refuelling is trained with respect to the contents of this procedure and of its own internal procedures.

11. Monitoring and measuring methods

Not applicable

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS

12. Contracted activities

Fuel storage and distribution activities through the HRS system is performed, on behalf of Aeroporti di Roma, by company SERAM S.p.A., which operates by virtue of an agreement for the subconcession of state areas.

13. Record Keeping

Registration name	Archiving method	Archiving location	Minimum storage time
MOV18_F01 – Declarations of the Airline Operator with regard to refuelling with passengers on board	electronic	Flight Control Operational Office	5 years
MOV18_F02 - Form for communicating the flight schedule	electronic	Flight Control Operational Office	5 years

Table 2 Objective evidence

14. List of Forms, Appendices and Annexes

Representation of the Forms and Appendices provided in the following pages are purely indicative and must not be used for operational purposes.

It is possible to request the editable version of the Forms and Appendices at address recordkeeping.oap@adr.it.

- FORMS
 - MOV18_F01 – Declarations of the Airline Operator with regard to refuelling with passengers on board or boarding/disembarking
 - MOV18_F02 - Form for communicating the flight schedule
- APPENDIX
 - MOV18_A01 - Description of the aviation fuel storage and distribution areas and of the process by which these are managed. **(confidential content)**

UNCONTROLLED COPY WHEN PRINTED/DOWNLOADED

ADR S.p.a. Restricted

This document contains information belonging to ADR S.p.a.; use of this information by the recipient is permitted exclusively in relation to the purpose for which the document was received. The reproduction or distribution of this document or any attachments is not permitted without the express authorization of ADR S.p.a.

COURTESY TRANSLATION – IN CASE OF CONFLICT ITALIAN VERSION PREVAILS