



## **Rome Fiumicino Airport**

# **All Weather Operations**

Airport rules and procedures for managing operations under conditions of reduced visibility

## **OPERATIONS LETTER**



Aeroporti di Roma

DSNA – CA Fiumicino

## **EDITION**

PHASE	Date	ENAV S.p.A.	Aeroporti di Roma S.p.A.
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## **REVISIONS**

No.	DATE	DESCRIPTION	PARA. REF.	PAG. REF.	NOTES
1	21/10/2016	New edition	-	-	New edition
2	10/10/2017	Minor changes required by	2.4,4.1.3,	7,8,9,11,	_
		the Regulator during the document	4.2,5.3,5.7.2.1	16,20,22,24	
		approval phase.	6.0,6.2,6.5,6.6,	,28	
		Changes due to infrastructural	8.0		
		and procedural changes.			





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## 1 DEFINITIONS/ACRONYMS

Visibility condition 1	Visibility sufficient for the pilot to taxi to the runway, avoiding collisions with other traffic on the taxiway and at the intersections with the other taxiways and for ATC staff to exercise sight control over all traffic.
Visibility condition 2	Visibility sufficient for the pilot to taxi to the runway, avoiding collisions with other traffic on the taxiway and at the intersections with the other taxiways, but insufficient for ATC staff to exercise sight control over all traffic.
Visibility condition 3	Visibility equivalent to an RVR of less than 400 metres
LVP (EU Reg. 139/14) Low-visibility procedures	Procedures implemented at an airport aimed at ensuring safe operations during below-standard category I, non-standard category II, category II and category III approaches and take-off in low visibility.
All weather operations (AWO)	Taxiing, take-off, approach and landing operations in conditions in which the visual reference is limited by the weather conditions
CEA	Centro Emergenze Aeroportuali [Airport Emergency Centre]
GCV	Ground Check Vehicle
ISE - SAR	AdR Operational Safety
Low visibility take-off (LVTO) - (EU Reg.	Take-off operations from a runway with an RVR of less than 400m but not less than 75m





#### 2 GENERAL INFORMATION

## 2.1 Purpose and scope of application

This document described the local operating procedures for the coordinated management of AWOs at the airport in accordance with the provisions of the Navigation Code and applicable legislation in force.

The rules and procedures contained in the document apply to the operations carried out at the airport from the moment Visibility Condition 2 occurs and dictate the safety parameters of the ground operations, mainly in order to minimise the risk of runway incursions and ground collisions between aircraft, aircraft and vehicles or infrastructure.

## 2.2 Operations

This Operations Letter enters into force 15 days after its publication, annulling any other document previously issued in this regard.

This OL was drawn up based on the results of previous operational experience, the evolution of the industry legislation and airport infrastructure in accordance.

ENAV-C.A. Fiumicino and Aeroporti di Roma undertake:

- To carry out and file, each for the part for which they are responsible, the activities relating to the safety assessments performed, in order to identify and manage the potential risks resulting from the introduction of the AWO procedures;
- To incorporate the contents of this OL in their respective Manuals as well as in the Airport Regulations;
- To prepare, update and implement an appropriate training programme for all staff involved; the documentation relating to the training is filed at their respective offices;
- To publish the parts of interest to the pilot in the AIP.

Aeroporti di Roma shall ensure that all operators involved in the airside part of the airport are trained on the meaning of the terms Visibility Condition 2/3 and LVP and that the safety implications, associated restrictions and any special procedures or precautions that must be adopted in the event of said conditions are clear.

#### 2.3 Revisions to the operations letter

The provisions of this OL may be subject to additions and/or amendments by means of subsequent agreements between the same parties.

For the regulation of the relations between the Airport Manager and the Handlers, please refer to the Airport Regulations currently in force.





#### 2.4 Reference standard

The main reference regulatory framework for operations under conditions of reduced visibility is as follows:

#### **EUROPEAN COMMISSION**

- > COMMISSION REGULATION (EU) No. 859/2008 dated 20 August 2008
- > COMMISSION REGULATION (EU) No. 923/2012 (SERA) dated 26 September 2012
- > COMMISSION REGULATION (EU) No. 965/2012 dated 05 October 2012
- > COMMISSION REGULATION (EU) No. 800/2013 dated 14 August 2013
- > COMMISSION REGULATION (EU) No. 139/2014 dated 12 February 2014 ENAC
- Regulation for the Construction and Operation of Airports Edition 2 Amendment 9 of 23 October 2014;
- Regulation of All-Weather Flight Operations in the National Airspace Edition 1 dated 30 June 2003;
- Air Rules Regulation 2016; Edition 2 dated 25 March 2015 Edition 3 dated 22 December
- Circular APT-05 dated 20 January 2000 Procedures in the event of damage to or degradation of airport installations for low-visibility operations (LVO).

### **ICAO**

- Doc. 4444-ATM/501 "Procedures for Air Navigation Services ATM";
- DOC 9365-AN/910 "Manual of all Weather Operations" (AWO);
- **Eur DOC 013** "European Guidance Material on All Weather Operations at aerodromes" " Ed. 5 2016";
- > DOC 9476 AN/927 "Manual of Surface Movement Guidance and Control System";
- ➤ DOC 9830-AN/452 "Advance Surface Movement Guidance and Control Systems (ASMGCS Manual".

#### **ENAV**

- Operating Manual for Air Traffic Services (MO-ATS);
- **→ AWO Guidelines and Provisions** Ed. 2 2017;
- > AIP ITALIA:
- MOMET Weather Operating Manual for Air Navigation. <u>AEROPORTI DI</u>

#### **ROMA**

- > Airport Regulations.
- > Airport Manual.





#### **3 PERMITTED OPERATIONS**

The following operations are permitted at Fiumicino Airport:

- CAT III A/B for RWY 16L/R;
- CAT I for RWY 34L/R;
- LVTO for RWY 25, RWY 16 R/L.

Operations are not permitted at an RVR of less than 75m.

#### 4 INFRASTRUCTURE AND INSTALLATIONS

#### 4.1 Available infrastructure and installations

Infrastructure and radio assistance:

#### 4.1.1 Runways 16L/16R:

- ILS with category III services
- Aiuti Visivi Luminosi (AVL) [Luminous Visual Aids] as in AIP AD 2 LIRF
- Powering of runway lights
- Automatic monitoring of AVL systems
- Systems for detecting the RVR at three points

#### 4.1.2 Runway 25:

- ILS with category I services
- Aiuti Visivi Luminosi (AVL) [Luminous Visual Aids] as in AIP AD 2 LIRF
- Powering of runway lights
- Automatic monitoring of AVL systems
- Systems for detecting the RVR at two points: TDZ and MID

### 4.1.3 Runway 34L/34R:

- ILS with category I services
- Aiuti Visivi Luminosi (AVL) [Luminous Visual
- Aids] as in AIP AD 2 LIRF
- Powering of runway lights
- Automatic monitoring of AVL systems

#### 4.1.4 Surveillance system:

- 2 SMR
- Multilateration

Note: the surveillance system at Fiumicino guarantees the coverage of the entire manoeuvring area.





## 4.2 Infrastructure and installations - responsibilities

For the purpose of adopting the appropriate obligations and sharing them with users:

- ENAV is responsible for informing CEA AdR of the operational decline of the surveillance and radio assistance systems and the issuance of the related NOTAMs.
- CEA AdR is responsible for aforementioned ENAC D.A. and ENAV of the decline in the operation of the light assistance systems, including the monitoring system and issuance of the related NOTAMs.

## 4.3 Managing damage to degradation of airport installations

ENAV and Aeroporti di Roma shall immediately act, each for the parts for which they are responsible, to immediately restore the efficiency of the systems, in accordance with the provisions of the current regulations.

#### 4.4 ILS critical areas

The ILS critical areas are specified in AIP AD2 LIRF 2-7.

#### 4.4.1 Movement in ILS critical areas

The signal emitted by the ILS is subject to an unacceptable interference in the event that an aircraft, vehicle or individual is located within the critical area. It follows that the critical area must always be protected, in all weather conditions, when accurate instrumental approaches are in progress; the critical areas are delimited using safety posts, ropes and vertical signs stating "no access".

#### 4.4.2 Movement in the ILS sensitive area

With the activation of LVPs, the sensitive ILS area must be protected from access by vehicles and individuals when approaches, landings or guided take-offs are in progress.



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# 5 PROCEDURES ON THE MOVEMENT AAREA UNDER CONDITIONS OF REDUCED VISIBILITY

When the weather conditions - in the manoeuvring area - deteriorate to the point that the control tower staff cannot control traffic by means of direct visual observation, entry to the airport is declared to be under conditions of reduced visibility (Visibility Conditions 2), regardless of the type of instrumental operations currently available.

The limited possibility of exercising full visual control of traffic in the manoeuvring area (runway control, visual verification of compliance with the authorisations provided, conflict prevention, etc.) determines the application of safeguard measures and increasingly stringent procedures, with progressive traffic movement restrictions that also affect airport capacity.

This chapter sets out the specific procedures to enable the safe movement of aircraft and vehicles, the protection of the runways and both the regularity and efficiency of operations.

## 5.1 Airport maintenance work and activities

Starting from visibility conditions 2 and/or the preparation of LVPs, all construction works, maintenance works or other activities within the manoeuvring area and adjacent areas shall be suspended or unauthorised, with possible exceptions for maintenance activities that cannot be delayed, given that they concern the airport's operational continuity or for appropriately segregated construction sites, under previously agreed and authorised conditions.

Therefore, the TWR, upon the occurrence of the aforementioned conditions, shall begin coordinating with CEA and SAR AdR for the actions for which it is responsible.

## 5.2 Vehicular traffic management

The safeguard measures, concerning the movement of vehicles, implemented as of visibility condition 2, aim to prevent collisions with aircraft and intrusions on the runways.

This preventions is mainly implemented on a strategic basis, by:

- **a.** limiting vehicular traffic in the manoeuvring area;
- **b.** segregating essential vehicular traffic essential to activities in the manoeuvring area;
- **c.** prohibiting transit, in the manoeuvring area, for the sole purpose of moving within the airport grounds.

The following chapters shall describe the application of the individual items.





## 5.2.1 Individuals and vehicles authorised to move within the manoeuvring area under conditions of reduced visibility

The access, presence and movement of individuals and vehicles in the manoeuvring area is limited to the essential minimum, following authorisations issued on a case-by-case basis by the Control Tower.

The Control Tower shall not authorise the crossing of the manoeuvring area for the sole purpose of moving within the airport grounds in the presence of alternative traffic routes; staff operating airside must refrain from making such requests to the TWR.

The following Organisations, under visibility conditions 2 and 3, are authorised to operate within the manoeuvring area:

- Aeroporti di Roma: vehicles intended for runway inspections, friction tests, snow clearing and de-icing, maintenance and control activities on systems and infrastructure, *follow-me* and bird control (BCU).
- ENAV C.A. Fiumicino: vehicles authorised for system maintenance and control activities.
- TECHNO-SKY: vehicles authorised for system maintenance and control activities.
- VVF: fire-fighting vehicles.

## 5.3 Visibility 2 conditions

As of visibility conditions 2, the procedures described below shall apply, which also coincide with and remain for visibility conditions 3.

The TWR operational staff who detect the existence of visibility conditions 2:

- Inform CEA AdR (the information shall also be provided when visibility conditions 1 are restored) and confirm thereto, every hour, of the possible existence of visibility conditions 2;
- In coordination with CEA AdR, shall arrange for the withdrawal of all vehicles and staff, present in the manoeuvring area and adjacent areas, involved in construction works, maintenance works or other non-essential activities;
- Provide for the lighting of all stop bars; the stop bars switched on in all visibility conditions are those present:

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oon TWY A (A-07 North and South); or on TWY B (B5) and TWY C (C1); oon TWY BC and TWY BD.
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NOTE. The switching on of the stop bars under visibility conditions 2 is aimed at preventing "runway incursions", not at protecting sensitive areas.

Preferably use different runways for departures and arrivals;





- In the manoeuvring area, apply the criteria provided for the movement of surface traffic referred to in paragraph 5.5.1;
- Inform the pilots and vehicles drivers of the limited visual conditions for Control Tower staff on the manoeuvring area;
- Provide pilots and vehicle drivers with timely and exhaustive information on the current traffic situation;
- In support of the surveillance systems for surface movements, use the pilot/driver position reports for maintaining *situational awareness*;
- Suspend the issuance of conditional authorisations;
- Suspend take-off procedures from an intermediate position and multiple alignments;
- Inform CEA AdR should visibility conditions 2 no longer exist.

## 5.4 Visibility conditions 3

The procedures associated with visibility 3 conditions apply whenever the RVR value, measured at any of the points available at the airport, is less than 400m.

Notwithstanding the continuation of the procedures already applied under visibility conditions 2, in visibility conditions 3, the TWR also becomes responsible, in the manoeuvring area, for applying "safe longitudinal spacing" between aircraft and between aircraft and vehicles, in accordance with the procedure set out in paragraph 5.5.2.

## 5.5 Surface traffic manoeuvring procedures

A simplification of the aircraft taxiways is carried out in order to minimise the possibility of loss of guidance by flight crews, to improve traffic management and to facilitate the application of "safe longitudinal spacing" in the manoeuvring area.

The taxiways, waiting positions and usable routes are shown in AIP-Italia AD 2 LIRF in the Low Visibility Chart provided in appendix to this OL.

#### 5.5.1 Manoeuvring under visibility conditions 2

Information resulting from the use of the surveillance systems are used, by the Controller, to maintain *situational awareness* and to provide instructions and information to vehicle drivers and flight crews in accordance with the provisions of the ATS regulations; the "see and avoid" principle for flight crews and vehicle drivers continues to apply to avoid collisions.





#### 5.5.2 Manoeuvring under visibility conditions 3

Information resulting from the use of surveillance systems are used by the Controller to maintain *situational awareness* and to provide instructions and information to vehicle drivers and flight crews in accordance with the applicable ATS procedure.

In order to guarantee safe longitudinal spacing on the ground between taxiing aircraft and their control are IHPs (Intermediate Holding Positions) are arranged along the taxiways, which define the various usable blocks.

The Controller, when regulating ground movement, using an operational A-SMGCS (SMR+MLAT), must ensure that, for each block, **only one aircraft/vehicle is present.** 



The full effectiveness of the A-SMGCS system and the assessment of the current situation may also permit the Controller the following power of discretion:

- to maintain a continuous taxiing of aircraft by giving permission to leave a block or to continue, without stopping, towards the next block when there is reasonable certainty that the aircraft/vehicle in front is about to leave the block concerned;
- If the pilot declares that he is able to keep the aircraft in front in view and to independently maintain his own separation, the block movement between aircraft cannot be applied for the entire taxiway or part thereof, including in relation to the remaining surface traffic.

The blocks that can be used at the airport are identified and shown on the map appended to this OL.

#### 5.5.3 Influence of damage on surface traffic manoeuvring

#### 5.5.3.1 Full SMR failure (ASMGCS MLAT Mode)

Information resulting from MLAT sensors are used by the Controller to maintain *situational* awareness and to provide instructions and information to vehicle drivers and flight crews in accordance with the applicable ATS procedure.





Under visibility conditions 3, in order to ensure safe longitudinal spacing on the ground between taxiing aircraft and their control, the Controller must ensure that the *buffer area* of a block is always present between two consecutive **aircraft/vehicles**.



If the vehicles are not equipped with transponders capable of providing position and identity, the procedure described above shall not apply; it follows that, as of visibility conditions 2, the simultaneous movement of vehicles and aircraft in the manoeuvring area is not permitted if the guarantees provided for in paragraph 5.2 on geographical segregation between any vehicular traffic and taxiing aircraft are not in place.

The FOLLOW-ME service required as a taxiing aid is an exception.

#### 5.5.3.2 MLAT failure (ASMGCS SMR Mode)

The provisions of paragraph 5.5.3.1 apply whenever it is possible to constantly monitor the position of the vehicle; otherwise, as of visibility condition 2, the simultaneous movement of vehicles and aircraft in the manoeuvring area shall not be permitted if the guarantees provided for in paragraph 5.2 on geographical segregation between any vehicular traffic and taxiing aircraft are not in place.

#### 5.5.3.3 Full A-SMGCS surveillance failure

As of visibility condition 2, the movement of just one aircraft at a time shall be permitted as follows:

- a. One departing aircraft may be authorised to move from parking bay to the waiting position, only when the approaching aircraft has landed and has confirmed that it has reached the parking bay or when the aircraft preceding it in the departure sequence has reported its take off; pushback, provided that it does not constitute any kind of impediment, can always be approved;
- b. an aircraft can only be authorised to land when the preceding approaching aircraft has landed and has confirmed that it has reached the parking bay or when the departing aircraft has confirmed its take off.
- **c.** In the manoeuvring area, the simultaneous movement of vehicles is not permitted in the presence of a taxiing aircraft; the *follow-me* service requested by the pilot as a taxiing aid is an exception.





## 5.6 Use of the follow-me service

The *follow-me* assistance service must be provided at the request of the pilot and:

- If the *follow-me* service is requested as an aid by a departing aircraft, the latter may be authorised to take off only when the *follow-me* service has re-entered the Apron area (Apron IHP) or other safe position;
- The *follow-me* service can only be used if equipped with an efficient radio connection to the TWR and, as with all other vehicles admitted in the manoeuvring areas, must confirm all authorisations and report reaching the various authorised positions;
- With an RVR of less than 400 m in the cases reported in section 5.7.2 below.
- With an RVR of between 150m and 75m, the *follow-me* assistance service shall be mandatory.

The routes followed by the *follow-me* service to assist departing and arriving aircraft are those specified by the TWR.

#### DEPARTING AIRCRAFT

At the start, the *follow-me* service will precede the aircraft, aligned on the taxiway, up to the IHP, specified by the TWR.

#### ARRIVING AIRCRAFT

On arrival, the *follow-me* service shall precede the aircraft from the IHP specified by the TWR, until it reaches the assigned apron, following the instructions of the TWR.

## 5.7 Managing the manoeuvring of aircraft on the aprons

The TWR shall provide instructions in order to maintain an orderly flow of air traffic in the aforementioned areas, providing accurate information regarding the current traffic and applying what is specified below.

#### 5.7.1 Determining visibility on the aprons

The reference transmissometers for establishing the visibility conditions on the aprons are as follows:

- WEST AREA (near IHP V1 and W1) transmissometer END 16R, if unavailable, MID 16R;
- EAST AREA (near IHP D1) MID 25, if unavailable, TDZ 25.





#### 5.7.2 Manoeuvring of aircraft

**Under RVR conditions below 400m**: taxiing operations are only permitted with the aid of the *follow-me* services in cases in which the centre line lights on the apron taxiways have, between them, a spacing of more than 15 m, in their absence or partial presence.

Considering the lighting provided by the lighthouse towers, the reduced aircraft taxiing speed
and the constant monitoring and maintenance of the horizontal signs, the use of the *follow-me*service is to be considered an alternative measure equivalent to the total or partial lack of
centre line taxiway lights.

#### 5.7.2.1 Luminous horizontal signs on the apron taxiways

The Taxiways without nocturnal horizontal signs or with only partial horizontal luminous signs are as follows:

W— NF – NH – NE – NC - Y (section behind stands 842 - 847) -  $\frac{S}{S}$  (section behind stands 600 - 605)

The Taxiways equipped with luminous horizontal spaced 30m apart are as follows:

EC - ED - EF - EH

### 5.8 Managing the manoeuvring of vehicles on the aprons

As soon as CEA AdR received, from the Control Tower, information on the preparation of LVPs, it shall disseminate information on the activation and changes to the LVP phases made by the TWR to all airport Authorities concerned, by issuing a circular telex and by telephone over a registered line for State Authorities.

By means of telex, CEA-AdR shall specifically request the minimisation of circulating vehicles and movement of equipment on the Apron area, in order to reduce the risk of potential collision between vehicles and aircraft.

#### 5.8.1 Access to the Manoeuvring area

The airport's **Manoeuvring** area is physically isolated from the outside by means of a fence which extends along the perimeter of the grounds and customs gates.

**Customs gates 1 and 5**: permit entry to vehicles from the outside into the Manoeuvring area. **Service roads:** extend within the Apron area. These permit all vehicles admitted to circulate on the aprons and adjacent area to move from one point of the aprons to another, only along the vehicular roads, without interfering with the Manoeuvring area.





**Perimeter road:** this is a ring road that runs from the inner side of the fence along the perimeter of the airport grounds, blocked in the event of the preparation of LVP procedures by State Authority staff.

The layout of the vehicular road, as stated, permits vehicles entering from the customer gates to directly use the service roads, to then continue on the vehicular or perimeter road on the Apron.

The roads within the Apron area do not enable a direct link to the taxiways in the Manoeuvring area or with the runways.

All vehicular roads within the Apron area are equipped with horizontal and vertical luminous signs, when the latter does not constitute an obstacle to the operation of aircraft, to protect the intersections between service roads and taxiways.





## **5.9 Airport capacity**

In order to identify airport capacity values according to the various visibility conditions, the following incoming traffic restrictions are established (DEP RWY 25/ARR RWY 16L/R) which remain purely indicative, however, being subject to numerous variables.

When the RVR decreases to below 1,500m and down to 800m, the CSOs of Fiumicino TWR and Rome ACC shall assess the possibility of issuing a restriction for incoming traffic, based on the traffic demand and visibility data that could enable an activation of the LVPs relating to runway 16L alone (please see paragraph 6.2.1).

Operational ASMGCS (SMR+MLAT)				
CONDITIONS	HOURLY ARRIVAL CAPACITY		HOURLY DEPARTURE	
<ul> <li>800m &gt; RVR TDZ &gt; 550m, or</li> <li>cloud base height in the approach sector =200ft</li> </ul>	32		16	
	HOURLY ARRIV  Total LVP activation	CAPACITY VAL  LVP Activation on RWY 16L alone	HOURLY DEPARTURE	
• 550m = RVR TDZ <u>&gt; 400</u> m	26	28	13	
<ul> <li>RVR TDZ &lt; 400m (Visibility Conditions 3), or</li> <li>cloud base height in the approach sector &lt;200ft</li> </ul>	16	22	10	



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In the event of SMR or MLAT failure				
	HOURLY ARRIVAL CAPACITY		HOURLY	
CONDITIONS	Total LVP activation	LVP activation on RWY 16L alone	DEPARTURE CAPACITY	
<ul> <li>RVR TDZ &lt; 400m (Visibility Conditions 3), or</li> <li>cloud base height in the approach sector &lt;200ft</li> </ul>	10	16	6	





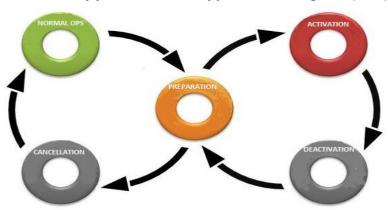
#### **6 LOW-VISIBILITY PROCEDURES**

At airports, LVPs aim to support the conduct of low-visibility aircraft operations (LVO) and take-off in RVR conditions of less than 550 m.

LVPs, in the wider context of AWOs, have the primary aim of protecting the ILS signal, in order to protect its integrity; their activation is subject, *inter alia*, to the preparation of a series of measures to ensure the safety of flight operations.

The implementation of LVPs at the airport breaks down into four distinct phases, the beginning, transition and end of which is always determined and reported, to the Authorities concerned, by the control tower according to the methods stated below.

Low-visibility procedures are applied according to 4 (four) distinct phases:



- Preparation phase: Preparatory to activation, this phase aims to implement all necessary actions to enable activation without delay on the occurrence of the foreseen conditions, involving all key airport operators in the necessary preparations and coordination. The preparation phase is completed with the obtaining, by all parties concerned, the expected clearance; this does not automatically involve the activation of LVPs, which shall only take place on reaching the expected RVR values and/or cloud base values or when so suggested by the contingent weather and/or operating conditions.
- **Activation phase:** the foreseen procedures shall be effective and all operations requiring active LVPs may be conducted:
- **Deactivation phase:** if the RVR and/or cloud base values exceed those foreseen for activation but are, however, within the preparation values, the restrictions connected to the activation of LVPs shall be suspended;
- **Cancellation phase:** all restrictions connected to the preparation phase shall be cancelled and the airport shall return to normal operations.





	ACQUISITION	
PREPARATION	Deterioration:  RVR at any point ≤ 800 m <b>and/or</b> cloud base = 200 Ft	YES
ACTIVATION	RVR ≤ 550 m at TDZ <b>and/or</b> cloud base <200 Ft	NO
DEACTIVATION	RVR > 550 m at TDZ <b>and/or</b> cloud base = 200 Ft	NO
CANCELLATION	RVR at all points > 800 m <b>and</b> cloud base > 200 Ft	YES

The cloud base reference values are those of the Local MET Report; the Controller, having assessed the weather conditions or pilot's requests, may request the preparation or activation of LVPs, even in the presence of values exceeding those stated above.

## **6.1 Preparation phase**

The following procedures are applied:

- a. The TWR makes a request, by telephone, for the preparation of Low-Visibility Procedures to the following Authorities:
  - AdR CEA.
  - Fire Brigade
  - Techno-Sky radio assistance maintenance staff
  - Rome ACC Operations Room Manager
  - Weather Staff

AdR CEA shall, in turn, inform:

- AdR Operational Safety (SAR)
- AdR AVL systems maintenance technical staff
- AdR First Aid Department
- Air Health Department
- Border Police which, in turn, shall inform the Carabiniere [Italian Police Force] and Guardia di Finanza [Italian Finance Police]

Upon completion of the relevant actions relating to the preparation phase, the TWR shall be provided for the clearance for the subsequent operations; failure to complete the activities required for the preparation shall jeopardise the activation of LVPs.

The continuation of the preparation phase must be reconfirmed, by the TWR Controller to the expected Authorities, every hour, without waiting for any response.





If the weather conditions exceed the expected values for preparing the LVPs, for a period of at least 20' and with reasonable stability forecasts, the preparation shall be cancelled.

b. This shall be followed, in coordination with AdR ISE-Operational Safety, by the withdrawal of all vehicles and staff, from the manoeuvring area and its vicinities, involved in construction works, maintenance works or other non-essential activities; said withdrawal is to be completed before the activation phase;

**Note:** The withdrawal of vehicles and staff from construction site areas shall take place as follows:

- the evacuation of staff and vehicles where no specific parking areas are provided for vehicles;
- the evacuation only of staff working at the construction sites, where specific parking areas are provided for vehicles.
- exceptions provided for in paragraph 5.1

## 6.2 Activation phase

The following procedures are applied:

- a. The TWR shall inform, by telephone, the Authorities referred to section a. of paragraph 6.1; the Fire Brigade shall also be informed of the transition from CAT II to CAT III;
- b. Prohibited circulation in the sensitive areas of the ILS
- c. The TWR shall normally use the runways as follows (LVP standard configuration):
  - Runway 25 for take-off;
  - Runway 16L for landings;
  - Runway 16R for landings and take-off of aircraft requiring a longer runway than runway 25 or in the event that runway 25 is unavailable.

**Note**: The PAPI systems of runways 16L and 16R shall be switched off during active LVP conditions.

- d. The use of junctions is governed as follows (ref.AD2-LIRF LVP Chart):
  - landing aircraft for runway 16L must exit the runway using junctions DG or DH; if unable to do so, they must exit using junction DL (stop bar DL1); aircraft must then taxi on taxiway D and access the apron via apron taxiway EG (IHP EG1);
  - landing aircraft for runway 16R must exit the runway using junction AG, accessing the apron via IHP V1 (or W1); if unable to do so, they must use junctions AH, AK or AL, then taxi on taxiway A (to IHP A1) and access the apron via IHP V1 (or W1);





- for Code "F" aircraft, please refer to the "Aerodrome Ground Movement Chart Acft Code F-ICAO" published in AIP AD2-15 LIRF";
- aircraft taking off from runway 25 must reach waiting point BA (or BB) by taxiing on taxiway B, using, for entry into the manoeuvring area, apron taxiways T (IHP T1 – for all aircraft from parking areas 700 and 800) or P (IHP P1 – for aircraft from all other parking areas);
- aircraft taking off from runway 16L must reach waiting point DA, using the following routes:
  - o if the runway is used for take-off alone → taxiway P (IHP P1) and D;
  - if the runway is used for mixed operations → taxiway T (IHP T1) or P (IHP P1) B –> C –> CD –> D.
- aircraft taking off from runway 16R must reach waiting point AA (or AB) by taxiing on taxiway B and/or A, using, to enter the manoeuvring area, the following apron taxiways:
  - taxiway M (IHP M1) for all aircraft from parking area 800 and from parking areas 701 to 707;
  - taxiway BT or T (IHP BT1 or T1) for all aircraft from parking areas 708 to 711 and from parking area 600;
  - o taxiway G (IHP G1) for all aircraft from all other parking areas.

#### 6.2.1 Runway 16L LVP activation

The activation of LVPs for runway 16L alone may be carried out, at the discretion of the CSO, who shall assess the weather and traffic situation, if the activation conditions occur only in correspondence with that area (e.g. in the event of patchy fog).

In this case, the reduction in capacity for the necessary spacing of incoming traffic (ILS sensitive area protection) shall only be applied on runway 16L; movements to/from the runway shall follow the rules set out for the current visibility conditions.

#### 6.2.2 LVP activation by cloud base

If the activation of LVPs, on one or more runways, is due to the cloud base and, in the manoeuvring area, visibility conditions 1remain, the movement restrictions provided for by paragraph 5.3 shall not be applied to surface traffic.

All other procedures related to the activation of LVPs shall be ensured.

#### **6.3 Deactivation phase**

The TWR shall inform, by telephone, the Authorities referred to section a. of paragraph 6.1.





## 6.4 Cancellation phase

When the RVR (at all detection points) and the cloud base exceed the values provided for preparation with a tendency towards stability/improvement for a period of at least 20', the LVPs may be cancelled.

A period of less than 20' may be considered if weather conditions rapidly improve.

The TWR shall inform the Authorities referred to section a. of paragraph 6.1. of the cancellation.

## 6.5 Approach and landing training

Approach and landing training in CAT II/III with RVR/cloud base values exceeding those provided for the activation of LVPs is not authorised (please see AIP AD 2 LIRF 1) .shall be subject to the current or foreseen traffic conditions.

The preparation and activation of LVPs is not required, only the protection of ILS sensitive areas.

## 6.6Departures with RVR values of less than 550m

If CAT II/III approach and landing operations are not available at the airport - be it for infrastructural or temporary decategorisation reasons - departures with RVR values of less than 550m are permitted provided that low-visibility procedures have been prepared and activated.





#### **7 CONTINGENCIES**

## 7.1 Lost aircraft or vehicle in the manoeuvring area

If an aircraft or vehicle reports that it is lost in the manoeuvring area and the TWR is unable to determine its position using the available means, all airport operations must be immediately suspended.

Taxiing traffic shall be instructed to report and maintain their position and shall be informed on the latest reported/known position of the lost traffic. The TWR shall instruct a follow-me service for the search, which shall be provided with all available information, including the latest reported position by the lost traffic and that of other traffic present within the manoeuvring area.

## 7.2 Radio failure in the manoeuvring area

Whenever an aircraft or vehicle operating in the manoeuvring area finds itself in a situation of radio failure, it must operate as follows:

- **Departing aircraft:** shall continue alone the assigned taxiway until it reaches the position corresponding to its clearance limit, where it shall wait for the follow-me service to return to the parking bay.
- **Arriving aircraft:** shall exit the runway and sensitive area on the appropriate taxiway and shall await the follow-me service for parking.
- **Vehicle:** shall exit the manoeuvring area as soon as possible (avoiding possible routes intended for aircraft), paying specific attention to the current traffic and shall inform the TWR, using the fastest available means, that it has exited the manoeuvring area.

#### 7.3 Vehicle breakdown

Whenever a vehicle in the manoeuvring area finds itself in a situation of mechanical breakdown, it must operate as follows:

Immediately notify the TWR by radio, providing its position and specifying that it is unable to remove the vehicle due to breakdown, keeping the low-beam lights, position lights and rotating beacon switched on.

## 7.4 Monitoring the efficiency of AVLs in the event of failure of the automatic monitoring system

The Control Tower, when the automatic categorisation system is operational, provides for a continuous and automatic monitoring of status data relating to the AVL system that contribute towards the formation of the airport category.





In the event that the automatic categorisation system is not working, AdR, for the remote control system alone (switching on, switching off and adjustment), shall ensure the presence of a continuous control within the power supply cabins, in order to directly operate the AVL systems and shall check the operational functionality of the lighting systems themselves by means of a visual inspection, to be carried out at least every 2 hours and, in any case, before the completion of the LVP preparation phase, informing the Control Tower of any failure/breakdown affecting the operations.

## 7.5 Damage to/degradation of the stop bar and/or no entry bar serving the runway junctions

The total and/or partial inefficiency of the stop bars involves the issuance of NOTAMs by AdR, but does not preclude the activation of LVPs and the regular performance of LVOs.

The TWR shall operate using the junctions that remain usable according to what is stated below.

#### 7.5.1 Managing full stop bar failures under visibility conditions 2/3

The full functionality of the stop bar (stop bar and n-entry bar), present at the junctions accessing the runways, is a necessary condition for the normal operational use of the junction, where the stop bar is present in visibility conditions 2/3.

#### The failure of all stop bars involves:

• movement in the manoeuvring area limited to just one movement at a time (please see paragraph 5.5.3.3).

#### 7.5.2 Partial stop bar failures

<u>Under visibility conditions 2/3,</u> the contingency measures specified below must be applied, providing information thereof to the pilots.

In any case, when access to the runway is no longer protected by an operational stop bar/no entry bar, the junction must be blocked using ICAO provisional lighting devices and aircraft must be duly routed on alternative routes; upon receipt, by AdR, of the communication of the closure of the broken down junctions, the TWR may again be able to permit the multiple movement of aircraft and vehicles within the manoeuvring area.

The following specific cases are highlighted:

"BA/BB" stop bar failure

In the event of failure of stop bar BA/BB which affects its use, operations on runway 25 shall be conducted using RHP BC/BD;

"AA/AB" stop bar failure





In the event of failure of stop bar AA/AB which affects its use, operations on runway 16R shall be conducted using RHP AC;

"DA" stop bar failure

In the event of failure of stop bar DA which affects its use, operations on runway 16R shall be conducted using RHP DB;

#### 7.5.2.1 Partial failures preventing the stop bar from being switched off

If a failure in the stop bars system, outside of the mandatory period of use (as of visibility conditions 2), affects their switching off by TWR staff, it/they shall be deactivated or obscured and the power supply shall also be deactivated.

A failure in the stop bars system, <u>under visibility conditions 2/3</u>, which affects their switching off, should the immediate deactivation of the lights or new routing of the aircraft be impossible, must be subject to the following contingency procedures, in order of preference:

- *follow-me* assistance shall be requested, which will precede the aircraft during the crossing of the RHP;
- in the absence of the *follow-me* service and only in correspondence with the aircraft actually reaching the relevant RHP, the aircraft shall be managed by TWR using appropriate phraseology.

## 7.6 Procedures in the event of an emergency and/or accident

The TWR, using the available means and/or notices, shall provide emergency vehicles with all the necessary instructions to identify the position of the aircraft requiring assistance and regarding the best route to reach it, applying the provisions contained in the Airport Emergency Plan.

When an accident occurs, all taxiing traffic in the manoeuvring area shall be instructed by the TWR to report and maintain their position.

Under visibility conditions 3 (RVR of less than 400 metres) the Airport Emergency Plan will be able to be activated over the entire manoeuvring area, for a single type A or B. In these conditions, in the event of an emergency (yellow level), only the completion of traffic taxiing operations in progress shall be permitted.





## **8 APPENDICES**

- □ Appendix 1 LVP Chart
- □ Appendix 2 LVP Chart

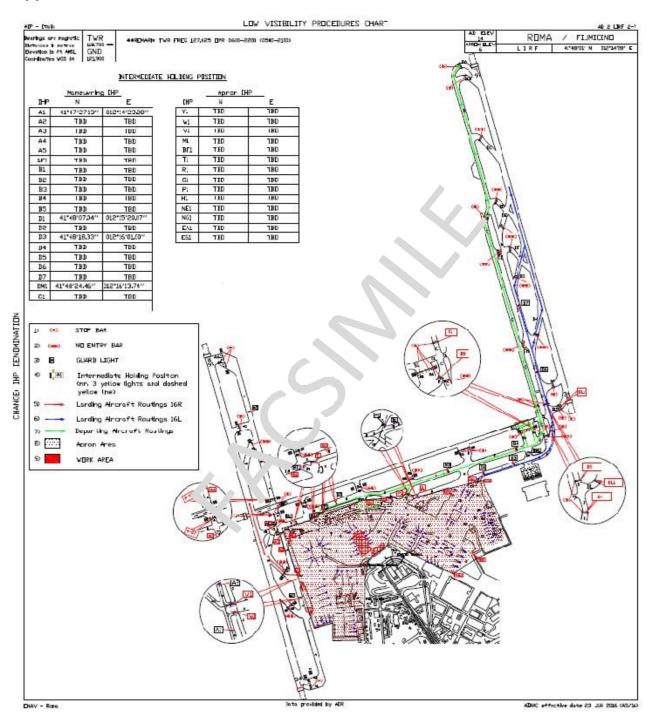
The current version of Appendix 1 can be downloaded in electronic format from the website:

- www.enav.it AIP-ITALIA
- https://www.adr.it/bsn-manuale-di-aeroporto-fco





## **Appendix 1 - LVP Chart**







# Appendix 2 - Sectorisation of the manoeuvring area for block manoeuvring purposes

For the purposes of applying block movement, under visibility conditions 3, the waiting positions published on the LVP chart shall be used.