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AWARENESS WORKSHOP ON THE LATEST AMENDMENTS 18,10 & 5 OF ANNEX 14 VOL 1, ANNEX 14 VOL 2 AND PANS-AERODROMES

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SESSION 3: LATEST AMENDMENTS OF ANNEX 14 VOL I AND II AND PANS-AERODROMES

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Amendment 18 , Annex 14
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Amendment 5 , PANS-
Aerodromes

Amendment 18
Annex 14
Volume I



SCOPE

Amendment 18, Annex 14, Volume I

Amendment 18 to Annex 14, Volume I relates to

- ✓ **aerodrome design,**
- ✓ **visual aids,**
- ✓ **ground handling and apron management services,**
- ✓ **obstacle limitation surfaces (OLS)**



AMENDMENT CONCERNING AERODROME DESIGN

Purpose

The amendment concerning aerodrome design aims to:

- ✓ **better reflect the required strip width for code number 3 runways and erase the geometric discrepancy in the widths of runway strips** between the various code numbers for non-instrument (NINST) runways



AMENDMENT CONCERNING AERODROME DESIGN

Synthesis of amendment

✓ **Width of runway strips for Code 3 NINST runways**

3.4.5 Recommendation.— A strip including a non-instrument runway should extend on each side of the centre line of the runway and its extended centre line throughout the length of the strip, to a distance of at least:

- 75 m where the code number is ~~3 or 4~~;
- 55 m where the code number is 3;
- 40 m where the code number is 2; and
- 30 m where the code number is 1

AMENDMENT CONCERNING AERODROME DESIGN

Synthesis of amendment

✓ Taxiway minimum separation distances

- Specific values for Code 3 NINST runways

Table 3-1. Taxiway minimum separation distances

Code letter	Distance between taxiway centre line and runway centre line (metres)								Taxiway centre line to taxiway centre line (metres)	Taxiway, other than aircraft stand taxilane, centre line to object (metres)	Aircraft stand taxilane centre line to aircraft stand taxilane centre line (metres)	Aircraft stand taxilane centre line to object (metres)
	Instrument runways				Non-instrument runways							
	Code number				Code number							
(1)	1	2	3	4	1	2	3	4	(10)	(11)	(12)	(13)
A	77.577.5				37.5	47.5	—	—	23	15.5	19.5	12
B	82	82	152	—	42	52	87	67	32	20	28.5	16.5
C	88	88	158	158	48	58	93	73	44	26	40.5	22.5
D	—	—	166	166	—	—	101	101	63	37	59.5	33.5
E	—	—	172.5	172.5	—	—	107.5	107.5	76	43.5	72.5	40

AMENDMENT CONCERNING AERODROME DESIGN

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Synthesis of amendment

✓ Grading of taxiway strips

- Reduced width of graded area for code letter D and OMGWS=9m up to 15 m-not included

3.11 Taxiway strips

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Grading of taxiway strips

3.11.4 **Recommendation.**— *The centre portion of a taxiway strip should provide a graded area to a distance from the centre line of the taxiway of not less than that given by the following tabulation:*

- *10.25 m where the OMGWS is up to but not including 4.5 m;*
- *11 m where the OMGWS is 4.5 m up to but not including 6 m;*
- *12.50 m where the OMGWS is 6 m up to but not including 9 m;*
- *~~18.50~~ 17 m where the OMGWS is 9 m up to but not including 15 m, where the code letter is D;*
- *19 m where the OMGWS is 9 m up to but not including 15 m, where the code letter is E;*
- *22 m where the OMGWS is 9 m up to but not including 15 m, where the code letter is F.*

Note.— *Guidance on width of the graded portion of a taxiway is given in the Aerodrome Design Manual (Doc 9157), Part 2.*

AMENDMENT CONCERNING AERODROME DESIGN

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Synthesis of amendment

- ✓ **Minimum distance from the runway centre line to a holding bay, runway-holding position or road-holding position**

- Specific values for Code 3 runways

Table 3-2. Minimum distance from the runway centre line to a holding bay, runway-holding position or road-holding position

Type of runway	Code number			
	1	2	3	4
Non-instrument	30 m	40 m	75 m 55 m	75 m
Non-precision approach	40 m	40 m	75 m	75 m
Precision approach category I	60 m ^b	60 m ^b	90 m ^{a,b}	90 m ^{a,b}
Precision approach categories II and III	—	—	90 m ^{a,b}	90 m ^{a,b}
Take-off runway	30 m	40 m	75 m 55 m	75 m

AMENDMENT CONCERNING VISUAL AIDS

Purpose

The amendment concerning visual aids aims to:

- ✓ **improve operational safety** by providing enhanced situational awareness to pilots through aerodrome visual aids.



AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

✓ Requirement of threshold markings for all paved runways

5.2.4 Threshold marking

Application

5.2.4.1 A threshold marking shall be provided at the threshold of a paved instrument runway, ~~and of a paved non-instrument runway where the code number is 3 or 4 and the runway is intended for use by international commercial air transport.~~

~~5.2.4.2 **Recommendation.** A threshold marking should be provided at the threshold of a paved non-instrument runway where the code number is 3 or 4 and the runway is intended for use by other than international commercial air transport.~~

AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

✓ New specifications for mandatory instruction signs

5.2.16 Mandatory instruction marking

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Location

5.2.16.3 The mandatory instruction marking on taxiways where the ~~code letter is A, B, C or D~~ **OMGWS is up to but not including 9 m** shall be located across the taxiway equally placed about the taxiway centre line and on the holding side of the runway-holding position marking as shown in Figure 5-10 (A). The distance between the nearest edge of the marking and the runway-holding position marking or the taxiway centre line marking shall be not less than 1 m.

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5.2.16.4 The mandatory instruction marking on taxiways where the ~~code letter is E or F~~ **OMGWS from 9 m up to but not including 15 m** shall be located on both sides of the taxiway centre line marking and on the holding side of the runway-holding position marking as shown in Figure 5-10 (B). The distance

AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

- ✓ **Harmonization of aerodrome lighting requirements for CAT II operations below 350 m**

5.3.12 Runway centre line lights

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Location

5.3.12.5 Runway centre line lights shall be located along the centre line of the runway, except that the lights may be uniformly offset to the same side of the runway centre line by not more than 60 cm where it is not practicable to locate them along the centre line. The lights shall be located from the threshold to the end at longitudinal spacing of approximately 15 m. Where the serviceability level of the runway centre line lights specified as maintenance objectives in 10.5.7 or 10.5.11, as appropriate, can be demonstrated and the runway is intended for use in runway visual range conditions of ~~350~~ 300 m or greater, the longitudinal spacing may be approximately 30 m.

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5.3.15 Rapid exit taxiway indicator lights

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Application

5.3.15.1 **Recommendation.**— *Rapid exit taxiway indicator lights should be provided on a runway intended for use in runway visual range conditions less than a value of ~~350~~ 300 m and/or where the traffic density is heavy.*

AMENDMENT CONCERNING VISUAL AIDS

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Synthesis of amendment

✓ Introduction of a new section on runway distance remaining signs :

5.4.8 Runway distance remaining signs

Note 1.— The inclusion of detailed specifications for runway distance remaining signs (RDRS) in this section is not intended to imply that an RDRS has to be provided. Attachment A, Section 23, provides guidance on the need to provide RDRSs. Guidance on installing RDRSs is given in the Aerodrome Design Manual (Doc 9157), Part 4.

Note 2.— Runway excursions may take place in all visibility or weather conditions. The use of RDRS can form part of effective runway excursion prevention measures. The purpose of RDRSs is to provide pilots with distance-to-go information to the extremity of the runway, to enhance situational awareness and enable pilots to decide whether to commence a go-around or to apply braking action for more efficient roll-out and runway exit speeds. It is essential that pilots operating at aerodromes with RDRS be familiar with the purpose of these signs.

Note 3.— Provisions related to the identification of hazards and management of safety risks, including the need for safety risk assessment related to runway safety, is available in PANS-Aerodromes (Doc 9981), Chapter 8.

Location

5.4.8.1 Where provided, runway distance remaining signs (RDRS) shall be placed along the full length of the runway at longitudinal spacing of approximately 300 m, parallel and equidistant from the runway centre line.

AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

✓ New section on unserviceability markings

7.4.1 Unserviceability markings

Application

7.4.1.1 **Recommendation.**— *Where operationally required, unserviceability signs should be supplemented by unserviceability markings on the surface of the pavement.*

7.4.1.2 Where it is impracticable to install an unserviceability sign in accordance with 7.4.3.1, an unserviceability marking shall be provided on the surface of the pavement.

Location

7.4.1.3 **Recommendation.**— *Unserviceability markings should be displayed across the surface of the taxiway or apron where necessary and positioned so as to be legible from the cockpit of an approaching aircraft.*

Characteristics

7.4.1.4 Unserviceability markings shall consist of an inscription in black upon an orange background.

7.4.1.5 **Recommendation.**— *The inscriptions should be in the form and proportions shown in Appendix 3.*

7.4.1.6 **Recommendation.**— *The background should be rectangular and extend a minimum of 0.5 m laterally and vertically beyond the extremities of the inscription.*

AMENDMENT CONCERNING VISUAL AIDS

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Synthesis of amendment

- ✓ **Introduction of :**
 - ✓ a new section on closed runway lighting
 - ✓ specifications on closed runway and taxiway markings

7.1.4 Closed runway lighting

Application

7.1.4.1 Recommendation.— *Where operationally desirable, at an aerodrome provided with runway lighting, closed runway lighting should be provided on runway (s) that are temporarily closed or temporarily restricted for take-off.*

Note 1.— *The purpose of the closed runway lighting is to reduce the likelihood of unintended landings during periods of poor visibility or at night whenever the runway lighting must be switched on for electrical maintenance.*

Note 2.— *In dusk or poor visibility conditions by day, lighting can be more effective than markings.*

Note 3.— *The closed runway lighting is intended to be controlled either automatically or manually by air traffic services or by the aerodrome operator.*

Location

7.1.4.2 A closed runway lighting shall be placed on the centre line near each extremity of the runway temporarily declared closed.

Note.— *Placement of a closed runway lighting would enhance the situational awareness of the runway closure to the pilot.*

AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

✓ New provisions on unserviceability lights

7.4 Unserviceable areas

7.4.2 Unserviceability lights

Application

~~7.4.1~~ 7.4.2.1 Unserviceability markers lights shall be displayed provided on a movement area used at night, wherever any portion of a taxiway, apron or holding bay the movement area is unfit for the movement of aircraft but it is still possible for aircraft to bypass the area safely. ~~On a movement area used at night, unserviceability lights shall be used.~~

Note 1.— Unserviceability markers and lights are used for such purposes as warning pilots of a hole in a taxiway or apron pavement or outlining a portion of pavement, such as on an apron, that is under repair. They are not suitable for use when a portion of a runway becomes unserviceable, nor on a taxiway when a major portion of the width becomes unserviceable. In such instances, the runway or taxiway is normally closed.

AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

✓ **New section on unserviceability signs**

7.4.3 Unserviceability signs

7.4.3.1 Unserviceability signs shall be provided where there is an operational need to indicate temporary changes to runway declared distances.

7.4.3.2 Recommendation.— Unserviceability signs should be provided where there is an operational need to indicate temporary changes to taxiways and aprons.

AMENDMENT CONCERNING GROUND HANDLING AND APRON MANAGEMENT SERVICES

Purpose

The amendment concerning ground handling and apron management services aims to:

- ✓ **improve aviation safety through the reduction of accidents, incidents and overall occurrences to aircraft, aerodrome facilities and personnel** with the introduction of provisions related to the safety oversight of ground handling and the consideration by apron management services of the requirements related to ground handling safety when manoeuvring the aircraft onto and off the stand, in order to safeguard the aircraft and ensure safety of personnel working around it.



AMENDMENT CONCERNING GROUND HANDLING AND APRON MANAGEMENT SERVICE

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Synthesis of amendment

- ✓ **New provisions to ensure apron safety**

Apron Safety

~~9.5.5~~ 9.5.8 An emergency vehicle responding to an emergency shall be given priority over all other surface movement traffic.

~~9.5.6~~ 9.5.9 A vehicle operating on an apron shall:

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9.5.10 Aircraft shall be guided while arriving on or departing from the aircraft stand.

Note.— Means for guidance can be a visual docking guidance systems, personnel, lighting or markings.

~~9.5.7~~ 9.5.11 An aircraft stand shall be visually monitored in-person or remotely to ensure that the recommended clearance distances are ~~provided to an aircraft using the stand~~ maintained.

Note.— Stand dependencies may occur when multiple centre lines are used on the same stand, creating possible variations in fixed or mobile obstacle separations with adjacent stands.

9.5.12 Emergency stop procedures shall be in place to stop an aircraft when entering the stand if the safety of operations on the aircraft stand is compromised.

Note.— Procedures on the training of operational personnel, and on apron safety and operations, are specified in the PANS-Aerodromes (Doc 9981), Part II, Chapters 1 and 7.

9.5.13 Personnel, other than those required to assist the initial arrival and departure of the aircraft, shall not be allowed to approach the aircraft when anti-collision lights are turned on and engines are running.

Note.— This does not apply to helicopter operations as per Annex 6, Part 3.

9.5.14 Parked aircraft shall be appropriately secured to prevent any unintended movement.

AMENDMENT CONCERNING GROUND HANDLING AND APRON MANAGEMENT SERVICE

Synthesis of amendment

- ✓ **Introduction of a new section on ground handling requiring States to regularly assess the impact of ground handling operations on aviation safety**
 - States are encouraged to establish criteria for the safety oversight of ground handling

9.7 Ground handling

(Applicable as of 26 November 2026)

Note 1.— Ground handling can be provided by an aircraft operator, an aerodrome operator or an independent organization. When provided by an aircraft operator or an aerodrome operator, this organization is also considered, as a ground handling service provider (GHSP).

Note 2.— A list of ground handling services is provided in the Manual on Ground Handling (Doc 10121), Appendix B.

9.7.1 States shall regularly assess the impact of ground handling operations on aviation safety.

Note.— Guidance on the assessment of the impact of ground handling operations on aviation safety is provided in the Manual on Ground Handling (Doc 10121), Chapter 2.

9.7.2. Recommendation.— States should establish criteria for the safety oversight of ground handling as part of their State Safety Programme (SSP).

Note 1.— Guidance on the establishment of criteria for the safety oversight of ground handling, and approaches for safety oversight are contained in the Manual on Ground Handling (Doc 10121)

Note 2.— Provisions on periodically reviewing the need to extend SMS to additional aviation sectors are contained in Annex 19 – Safety Management. Examples of additional aviation sectors can include GHSP.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Purpose

The amendment concerning obstacle limitation surfaces aims to:

- ✓ **Ensure that only the obstacle limitation surfaces required are adopted**, and that they are performance-based and are adaptable to the type of operations conducted at the aerodrome.
 - Current OLS are prescriptive. In the amendment, States will know the surfaces needed to support the type of operations conducted at the aerodrome considered.
 - Surfaces that are not required need not be safeguarded and areas which would otherwise be affected by the surfaces can then be released for development.



AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

- ✓ **A new chapter 4-Obstacle restriction and removal** is included in the amendment

- A set of surfaces, OES and OFS, are defined with specific dimensions based on a new design group: the aeroplane design group (ADG)

CHAPTER 4.	Obstacle restriction and removal	4-x
4.1	General	4-x
4.2	Obstacle free surfaces (OFS)	4-x
4.3	Obstacle evaluation surfaces (OES)	4-x
4.4	Obstacle limitation requirements.....	4-x
4.5	Obstacle limitation surfaces requirements.....	4-x
4.6	Objects outside the obstacle free surfaces and obstacle evaluation surfaces	4-x

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ Introduction of the aerodrome design group

The intent of the Aeroplane Design Group (ADG) is to provide a method for interrelating the specifications for the management of obstacles around aerodromes using two criteria related to the aeroplane performance characteristics and dimensions:

- the indicated airspeed of aircraft at threshold
- the aeroplane wingspan.

Note.— Indicated airspeed at threshold (V_{at}) is equal to the stall speed V_{so} multiplied by 1.3, or stall speed V_{s1g} multiplied by 1.23 in the landing configuration at the maximum certificated landing mass.

If both V_{so} and V_{s1g} are available, the higher resulting V_{at} applies.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ Introduction of the aerodrome design group

1.8.1 An ADG shall be determined for each runway in accordance with the characteristics of the critical aeroplane for which the runway is intended.

1.8.2 The ADG shall be determined from Table 1-2, by selecting the ADG corresponding to the highest values of indicated airspeed at threshold and wingspan of the aeroplanes for which the runway is intended.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ Introduction of the aerodrome design group

- Table 1.2

(Applicable as of 21 November 2030)

Aeroplane Design Group	Indicated airspeed at threshold		Wingspan
I	Less than 169 km/h (91 kt)	and	Up to but not including 24 m
IIA	Less than 169 km/h (91 kt)	and	24 m up to but not including 36 m
IIB	169 km/h (91 kt) up to but not including 224 km/h (121 kt)	and	Up to but not including 36 m
IIC	224 km/h (121 kt) up to but not including 307 km/h (166 kt)	and	Up to but not including 36 m
III	Less than 307 km/h (166 kt)	and	36 m up to but not including 52 m

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IV	Less than 307 km/h (166 kt)	and	52 m up to but not including 65 m
V	Less than 307 km/h (166 kt)	and	65 m up to but not including 80 m

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ Introduction of a new set of surfaces

- **Obstacle free surfaces (OFS):** The purpose of the obstacle free surfaces is to establish airspace that preserves the accessibility of the aerodrome and the safety of operations by protecting aeroplanes during approaches and go-arounds.
- **Obstacle evaluation surfaces (OES):** The purpose of the obstacle evaluation surfaces is to establish the airspace necessary to determine the acceptability of obstacles by evaluating their impact on existing and/or intended aeroplane operations at an aerodrome. The impact is evaluated on safety, regularity and demand of the operations identified by States.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

4.5.1 Obstacle free surfaces

Synthesis of amendment

✓ Obstacle free surfaces specifications

4.5.1.1 The following obstacle free surfaces shall be established for a non-instrument or non-precision approach runway:

- a) approach surface;
- b) transitional surfaces;
- c) inner approach surface; and
- d) inner transitional surfaces.

4.5.1.2 The following obstacle free surfaces shall be established for a precision approach runway:

- a) Approach surface;
- b) transitional surfaces;
- c) inner approach surface;
- d) inner transitional surfaces; and
- e) balked landing surface.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ Obstacle evaluation surfaces specifications

4.5.2 Obstacle evaluation surfaces

4.5.2.1 The following obstacle evaluation surfaces shall be established:

- a) in case of circling approach and/or visual circuits — the horizontal surface specified in 4.3.2 or a specific OES;
- b) in case of straight-in instrument approaches other than precision approaches, where the horizontal surface is not established — the surface for straight-in instrument approaches specified in 4.3.3 or a specific OES;
- c) in case of precision approach procedure — the surface for precision approaches specified in 4.3.4 or a specific OES;
- d) in case of instrument departure procedure — the instrument departure surface specified in 4.3.5 or a specific OES;
- e) in case of take-off operations — the take-off climb surface specified in 4.3.6 or a specific OES; and
- f) in case of operations different from the above — specific OES.

Note 1.— Operations mentioned in f) may include curved approach, VFR circuit patterns, etc.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ New provisions for obstacle limitation requirements

➤ Obstacle free surfaces (OFS):

- Fixed objects shall not be permitted above the OFS.
- Visual aids required for air navigation purposes are permitted.
- Mobile objects shall not be permitted above the OFS during the use of the runway for landing.

➤ Obstacle evaluation surfaces (OES):

- States shall ensure that obstacles penetrating the obstacle evaluation surfaces **are only permitted when, after aeronautical study**, it is determined that **the obstacles do not adversely affect the safety or significantly affect the regularity** of the existing and intended operations of aeroplanes.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES (OLS)

Synthesis of amendment

✓ Location of runway holding position

3.12.9 Until 20 November 2030, the location of a runway-holding position established in accordance with 3.12.3 shall be such that a holding aircraft or vehicle will not infringe the obstacle free zone, approach surface, take-off climb surface or ILS/MLS critical/sensitive area or interfere with the operation of radio navigation aids.

3.12.9 As of 21 November 2030, the location of a runway-holding position established in accordance with 3.12.3 shall be such that a holding aircraft or vehicle will not infringe the inner approach surface, inner transitional surfaces, balked landing surface, approach surface, take-off climb surface or ILS/MLS critical/sensitive area or interfere with the operation of other radio navigation aids.

EXPECTATIONS TO STATES

Amendment 18, Annex 14, Volume I

Each State is invited to :

- ☐ Notify disapproval of the amendment or any part of it if any before 4 August 2025
- ☐ Notify before **27 October 2025** (visual aids and aerodrome design), **26 October 2026** (ground handling) and **21 October 2030** (OLS)
 - ✓ 1) any differences that will exist on the applicability dates between the national regulations or practices of the State and the provisions of the whole of Annex 14, Volume I, as amended by all amendments up to and including Amendment 18, and thereafter of any further differences that may arise; and
 - ✓ 2) the date or dates by which the State will have complied with the provisions of the whole of Annex 14, Volume I, as amended by all amendments up to and including Amendment 18.



SUPPORTING ICAO DOCUMENTATION

Amendment 18, Annex 14, Volume I

Title, Doc no.	Type (PANS/TI/Manual/Circ.)	Planned publication date
<i>Procedures for Air Navigation Services (PANS) — Aerodromes</i> (Doc 9981)	PANS	November 2025
<i>Procedures for Air Navigation Services — Aircraft Operations, Procedures for Air Navigation Services — Aircraft Operations, Volume II — Construction of Visual and Instrument Flight Procedures</i> (Doc 8168)	PANS	Published
<i>Airport Services Manual, Part 6 — Control of Obstacles</i> (Doc 9137)	Manual	July 2025
<i>Aerodrome Design Manual, Part 1 — Runways and Part 2 — Taxiways, Aprons and Holding Bays</i> (Doc 9157)	Manual	July 2025
<i>Aerodrome Design Manual, Part 4 — Visual Aids</i> (Doc 9157)	Manual	July 2025
<i>Airport Planning Manual, Part 1 — Master Planning</i> (Doc 9184)	Manual	Published
<i>Manual on Ground Handling</i> (Doc 10121)	Manual	Published

02

Amendment 10
Annex 14
Volume II



SCOPE

Amendment 10, Annex 14, Volume II

Amendment 10 to Annex 14, Volume II relates to

- ✓ **certification and a safety management system (SMS) at heliports,**
- ✓ **obstacle limitation surfaces**
- ✓ **and visual aids (lighting) associated with heliports.**



AMENDMENT CONCERNING CERTIFICATION AND SMS AT HELIPORTS

Purpose

The amendment concerning certification and SMS at heliports aims to:

- ✓ **reduce helicopter accidents and incidents at heliports** by introducing a regulatory requirement for certification and SMS of public use heliports with continuous State oversight



AMENDMENT CONCERNING CERTIFICATION AND SMS AT HELIPORTS

Synthesis of amendment

1.4 Certification of heliports (Applicable as of 26 November 2026)

Note.— The intent of these specifications is to ensure the establishment of a regulatory regime so that compliance with the specifications in this Annex can be effectively enforced. It is recognized that the methods of ownership, operation and surveillance of heliports differ among States. The most effective and transparent means of ensuring compliance with applicable specifications is the availability of a separate safety oversight entity and a well-defined safety oversight mechanism with support of appropriate legislation to be able to carry out the function of safety regulation of heliports. When a heliport is granted a certificate, it signifies to aircraft operators and other organizations operating on the heliport that, at the time of certification, the heliport meets the specifications regarding the facility and its operation, and that it has, according to the certifying authority, the capability to maintain these specifications for the period of validity of the certificate. The certification process also establishes the baseline for continued monitoring of compliance with the specifications. Information on the status of certification of heliports would need to be provided to the appropriate aeronautical information services for promulgation in the Aeronautical Information Publication (AIP). See 2.6.1 and the PANS-AIM (Doc 10066), Appendix 2, AD 1.5 (1).

1.4.1 States shall certify heliports used for international operations in accordance with the specifications contained in this Annex as well as other relevant ICAO specifications through an appropriate regulatory framework.

AMENDMENT CONCERNING CERTIFICATION AND SMS AT HELIPORTS

Synthesis of amendment

1.4.2 The regulatory framework shall include the establishment of criteria and procedures for the certification of heliports.

Note.— Guidance on a regulatory framework is given in the Heliport Manual (Doc 9261).

1.4.3 As part of the certification process, States shall ensure that a heliport manual which will include all pertinent information on the heliport site, facilities, services, equipment, operating procedures, organization and management including a safety management system (SMS), is submitted by the applicant for approval/acceptance prior to granting the heliport certificate.

Note 1.— Guidance on the contents of a heliport manual, including procedures for its submission and approval/acceptance, verification of compliance and granting of a heliport certificate, can be found in the Heliport Manual (Doc 9261).

Note 2.— Annex 19 — Safety Management contains SMS provisions applicable to certified heliports. Overarching guidance on SMS is contained in the Safety Management Manual (Doc 9859) with sector-specific guidance found in the Heliport Manual (Doc 9261).

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES AT HELIPORTS

Purpose

The amendment concerning obstacle limitation surfaces at heliports aims to:

- ✓ **allow for the flexibility required for the introduction of heliports in obstacle rich environments** by taking into account that most of new heliports are located in congested areas instead of large open areas and no longer have runway type final approach and take off-areas (FATOs)



AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES AT HELIPORTS

Synthesis of amendment

4.1.2 *Characteristics.* The limits of an approach surface shall comprise:

- a) an inner edge, horizontal and perpendicular to the centre line of the approach surface, with a minimum width equal in length to the minimum-specified width/diameter of the FATO plus the safety area, ~~perpendicular to the centre line of the approach surface and located at:~~
 - 1) the outer edge of the safety area; or
 - 2) when vertical procedures are being utilized, directly above the outer edge of the safety area.
- b) two side edges originating at the ends of the inner edge diverging uniformly at a specified rate from the vertical plane containing the centre line of the FATO; and:
- c) an outer edge horizontal and perpendicular to the centre line of the approach surface ~~and at:~~
 - 1) a ~~specified~~ height of 152 m (500 ft) above the elevation of the FATO; or
 - 2) when a PinS approach procedure with proceed visually instruction is defined, a specified height above the elevation of the FATO.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES AT HELIPORTS

Synthesis of amendment

4.1.910 *Characteristics.* The limits of a transitional surface shall comprise:

- a) a lower edge beginning at a point on the side of the approach/~~or take-off~~ climb surface at a specified height ~~above the lower edge~~ extending down the side of the approach/~~or take-off~~ climb surface to the inner edge ~~of the approach/take-off climb surface~~ and from there along the length of the side of the helicopter clearway, when provided, and safety area, parallel to the centre line of the FATO; and
- b) an upper edge located at: ~~a specified height above the lower edge as set out in Table 4-1.~~
 - 1) 45 m (150 ft) above the FATO; or
 - 2) when vertical procedures are being utilized; 15 m (50 ft) above the elevation of the upper edge of the ascent/descent surface.

AMENDMENT CONCERNING VISUAL AIDS AT HELIPORTS

Purpose

The amendment concerning obstacle limitation surfaces at heliports aims to:

- ✓ **provide clarity on the operational requirements and safety benefits of lighting system** used at heliports with the addition of new notes



AMENDMENT CONCERNING VISUAL AIDS AT HELIPORTS

Synthesis of amendment

5.3.2 Heliport beacon

Note.— The objective of a heliport beacon is to make a heliport more conspicuous to assist the pilot to locate and identify the heliport at night and/or by day in reduced visibility.

5.3.3 Approach lighting system

Note.— The objective of an approach lighting system is to allow the helicopter operator, by day and night, to visually identify the heliport and align the helicopter on the centreline of the FATO upon arriving at a prescribed point on the approach flight path.

5.3.4 Flight path alignment guidance lighting system

Note.— The objective of a flight path alignment guidance lighting system is to indicate, by day, night, and in reduced visibility, available approach and/or departure flight path direction(s).

5.3.14 Floodlighting of obstacles

Note.— The objective of obstacle floodlighting is to highlight the shape and location of obstacles in the vicinity of the heliport, to assist a pilot flying at night to avoid all obstacles by a safe margin.

EXPECTATIONS TO STATES

Amendment 10, Annex 14, Volume II

Each State is invited to :

- ☐ Notify disapproval of the amendment or any part of it if any before 4 August 2025
- ☐ Notify before **27 October 2025** (OLS and visual aids) and **26 October 2026** (Certification and SGS)
 - ✓ 1) any differences that will exist on the applicability dates between the national regulations or practices of the State and the provisions of the whole of Annex 14, Volume II, as amended by all amendments up to and including Amendment 10, and thereafter of any further differences that may arise; and
 - ✓ 2) the date or dates by which the State will have complied with the provisions of the whole of Annex 14, Volume II, as amended by all amendments up to and including Amendment 10.



SUPPORTING ICAO DOCUMENTATION

Amendment 10, Annex 14, Volume II

Title	Type (PANS/TI/Manual/Circ)	Planned publication date
Doc 9261, <i>Heliport Manual, Part I – Onshore Heliports</i> (forthcoming)	Manual	Q2 2025
Doc 9261, <i>Heliport Manual, Part II – Offshore Heliports</i> (forthcoming)	Manual	Q2 2025
Doc 9261, <i>Heliport Manual, Part III – Certification and SMS for Heliports</i> (forthcoming)	Manual	Q2 2025
Doc 9859, <i>Safety Management Manual (SMM)</i> , 5th edition (forthcoming)	Manual	Q3 2025

03

Amendment 5 , PANS- Aerodromes



SCOPE

Amendment 5, PANS-Aerodromes

Amendment 5 to PANS-Aerodromes relates to

- ✓ **Visual aids**
- ✓ **Obstacle limitation surfaces**



AMENDMENT CONCERNING VISUAL AIDS

Purpose

The amendment concerning visual aids aims to:

- ✓ **Improve aerodrome safety** with **enhanced visual aids** for pilots to **denote restricted use area or any temporary changes** to the movement area due to aerodrome maintenance activities.



AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

New provisions in PANS-Aerodromes Part II-Aerodrome operational Management,

- ❑ Chapter 4 –Work in progress, 4.3.Operational practices
 - ✓ **4.3.3**
 - ✓ **4.3.8**



AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

4.3 OPERATIONAL PRACTICES

4.3.3 A safety risk assessment of all planned works should be completed beforehand in order to ensure the risks hazards to the safe operation of aircraft have been identified by the aerodrome operator in coordination with interested parties, and appropriate mitigation measures introduced to keep risks to an acceptable level. Risk mitigation actions include, inter alia, the use of visual aids to denote restricted use area.

4.3.8 The following actions should be taken when establishing the worksite, as well as throughout the duration of works, when necessary:

- a) a safety risk assessment should be conducted to determine the need for visual aids to indicate temporary changes to the movement area;
- ab) unserviceability markers are displayed when any portion of a taxiway, apron, or holding bay is unfit for the movement of aircraft, but it is still possible for aircraft to bypass the area safely;
- bc) existing markings leading into a worksite should be masked or the route closed;

AMENDMENT CONCERNING VISUAL AIDS

Synthesis of amendment

...

Note 1.— Unserviceability relates to areas temporarily not available for operational use.

...

Note 5.— Temporary changes to the movement area may include, inter alia, reduction in the runway length, reduction in the maximum allowable wingspan, taxiway closure or any other closure to the movement area. Certain visual aids such as closed runway lighting could be used for a temporary period varying from a few hours to several weeks or longer, depending on the works in progress or other closure reasons.

...

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES

Purpose

The amendment concerning obstacle limitation surfaces aims to:

- ✓ **ensure that a holistic safeguarding of the airspace against obstacles is provided** through a set or sets of surfaces with clear purposes and characteristics that are **performance based and are adaptable to the type of operations** conducted at the aerodrome.



AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES

Synthesis of amendment

New chapter in PANS-Aerodromes, Part II –Aerodrome operational practices

- ✓ **Chapter 10 –Obstacle evaluation and control** :The chapter contains provisions pertaining to obstacle limitation surfaces and aeronautical study.
 - ✓ **selection of required obstacle limitation surfaces**, comprising obstacle free surfaces and obstacle evaluation surfaces
 - ✓ **how these surfaces can be adjusted** to match the type of operations provided at an aerodrome.
 - ✓ how to **conduct aeronautical study**



AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES

Synthesis of amendment

The Surfaces

- ❑ The OFS are surfaces that are applied within a defined airspace in the immediate vicinity of the aerodrome.
 - ✓ established to protect the existing and future operational capacity of the aerodrome by limiting obstacles.
 - ✓ intended to preserve accessibility of the aerodrome by containing standard operations (straight-in approaches).
 - ✓ to be kept free from obstacles except for existing obstacles and/or terrain which would have been assessed earlier.
- ❑ The OES are surfaces that are applied in a defined airspace, in addition to the OFS, to be evaluated against obstacles.
 - ✓ used in determining the acceptability of obstacles in ensuring safety and regularity of operations at the aerodrome.
 - ✓ penetration of the OES by terrain or obstacles are to be evaluated as they may adversely affect the safety or accessibility of the intended aircraft operations.
- ❑ The dimensions of OFS and OES are determined based on aeroplane design group (ADG) categorization based on two criteria:
 - ✓ aircraft's indicated airspeed at threshold
 - ✓ aeroplane wingspan

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES

Synthesis of amendment

Aeronautical studies

- ☐ The impact of objects penetrating the OFS and OES must be examined through the conduct of an aeronautical study.
- ☐ An aeronautical study is a process of examining an aeronautical concern by assessing its impact on safety and regularity of aircraft operations and identifying, if need be, possible mitigation measures.
- ☐ In addition to flight operations, the aeronautical study must consider and address other aeronautical concerns such as the impact on :
 - ✓ communication facilities,
 - ✓ navigational aids,
 - ✓ aerodrome operations
 - ✓ air traffic control line of sight.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES

Synthesis of amendment

Requirements

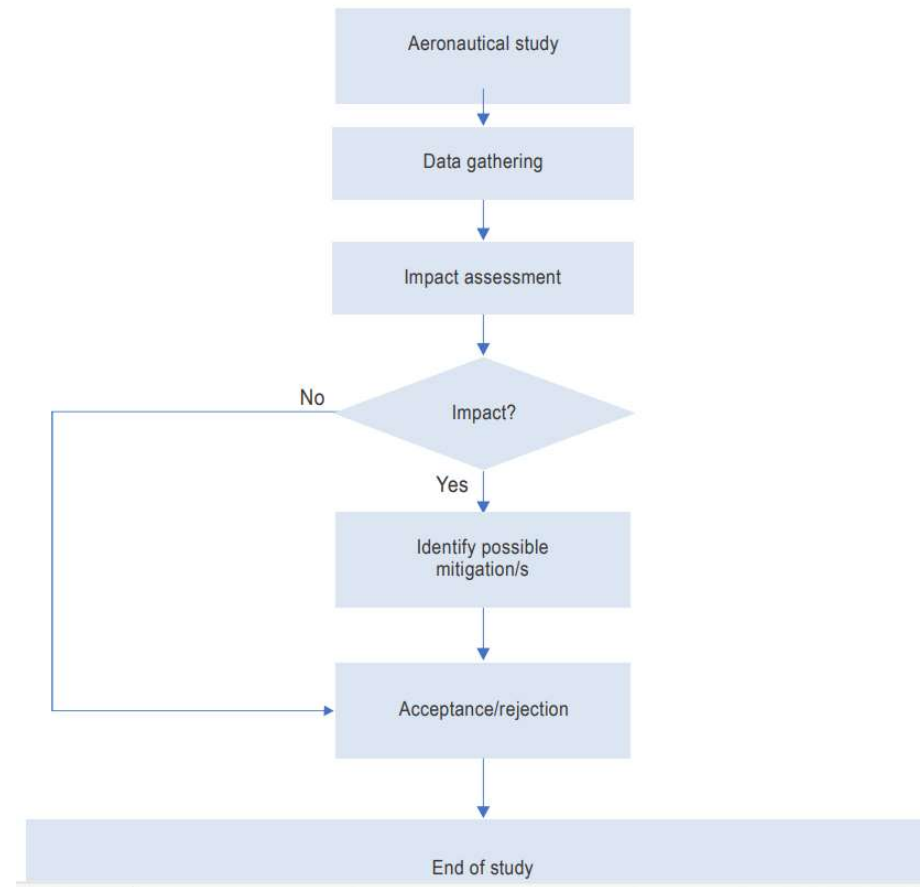
- ☐ States shall define the roles and responsibilities of stakeholder(s) and delegate them:
 - ✓ appropriate authority in the identification of the OFS and required OES,
 - ✓ safeguarding of these surfaces,
 - ✓ surveillance of the areas within these surfaces.
- ☐ States shall establish a process for the identification of OFS and OES required to protect flight operations at an aerodrome.
- ☐ States shall establish a process for conducting aeronautical study.
- ☐ States shall define the party/parties responsible for conducting the aeronautical study.

AMENDMENT CONCERNING OBSTACLE LIMITATION SURFACES

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Synthesis of amendment

☐ Aeronautical study process



EXPECTATIONS TO STATES

Amendment 5, PANS Aerodromes

Each State is invited to :

- ☐ Implement the provisions of the PANS-Aerodromes as amended.
- ☐ Publish in the Aeronautical Information Publication a list of any significant differences which will exist between the amended provisions of the PANS-Aerodromes and the national regulations :
 - ✓ **on 27 November 2025** for provisions related to visual aids
 - ✓ **on 21 November 2030** for provisions related to obstacle limitation surfaces



SUPPORTING ICAO DOCUMENTATION

Amendment 5, PANS-Aerodrome

Title	Type (PANS/TI/Manual/Circ)	Planned publication date
<i>Procedures for Air Navigation Services — Aircraft Operations, Procedures for Air Navigation Services — Aircraft Operations, Volume II — Construction of Visual and Instrument Flight Procedures (Doc 8168)</i>	PANS	Published
<i>Airport Services Manual, Part 6 — Control of Obstacles (Doc 9137)</i>	Manual	July 2025
<i>Aerodrome Design Manual, Part 4 – Visual Aids (Doc 9157)</i>	Manual	July 2025



Thank You!