Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 1 Reference 1.2.2 **Standard**	1.2.2 The specifications, unless otherwise indicated in a particular context, shall apply to all aerodromes open to public use in accordance with the requirements of Article 15 of the Convention. The specifications of Annex 14, Volume I, Chapter 3, shall apply only to land aerodromes. The specifications in this volume shall apply, where appropriate, to heliports but shall not apply to stolports. *Note.— Although there are at present no specifications relating to stolports, it is intended that specifications for these aerodromes will be included as they are developed. In the interim, guidance material on stolports is given in the* Stolport Manual *(Doc 9150)*.	CAR 139.5.	Less protective or partially implemented or not implemented	Only aerodromes used for regular air transport operations by aircraft with more than 30 passenger seats are required to be certificated.	
Chapter 1 Reference 1.2.3 **Standard**	1.2.3 Wherever a colour is referred to in this Annex, the specifications for that colour given in Appendix 1 shall apply.	CARs.	Less protective or partially implemented or not implemented	Not specifically mandated in CARs.	
Chapter 1 Reference 1.4.2 **Recommendation**	1.4.2 **Recommendation.—** *States should certify aerodromes open to public use in accordance with these specifications as well as other relevant ICAO specifications through an appropriate regulatory framework*.	CAR Part 139.	Less protective or partially implemented or not implemented	Only aerodromes used for regular air transport operations by aircraft with more than 30 passenger seats are required to be certificated.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 1 Reference 1.7.1 **Standard**	**1.7 Specific procedures for aerodrome operations** *Introductory Note.— This section introduces PANS-Aerodromes (Doc 9981) for use by an aerodrome undertaking an assessment of its compatibility with the type of traffic or operation it is intending to accommodate. The material in the PANS-Aerodromes addresses operational issues faced by existing aerodromes and provides the necessary procedures to ensure the continued safety of operations. Where alternative measures, operational procedures and operating restrictions have been developed, these are detailed in the aerodrome manual and reviewed periodically to assess their continued validity. The PANS-Aerodromes does not substitute nor circumvent the provisions contained in this Annex. It is expected that infrastructure on an existing aerodrome or a new aerodrome will fully comply with the requirements in this Annex. See Annex 15, 5.2.2 c) on a State's responsibilities for the listing of its differences to the related ICAO Procedures in its Aeronautical Information Publication.* 1.7.1 When the aerodrome accommodates an aeroplane that exceeds the certificated characteristics of the aerodrome, the compatibility between the operation of the aeroplane and aerodrome infrastructure and operations shall be assessed and appropriate measures developed and implemented in order to maintain an acceptable level of safety during operations. *Note.— Procedures to assess the compatibility of the operation of a new aeroplane with an existing aerodrome can be found in the PANS-Aerodromes (Doc 9981).*	CAR 139.131.	Different in character or other means of compliance	Although not specifically mentioned in the rule, this would be a trigger for an aeronautical study required by the rule.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 2 Reference 2.1.1 **Standard**	**CHAPTER 2. AERODROME DATA** **2.1 Aeronautical data** 2.1.1 Determination and reporting of aerodrome-related aeronautical data shall be in accordance with the accuracy and integrity classification required to meet the needs of the end-users of aeronautical data. *Note.— Specifications concerning the accuracy and integrity classification related to aerodrome-related aeronautical data are contained in PANS-AIM (Doc 10066), Appendix 1.*	CARs.	Less protective or partially implemented or not implemented	Not specified in CARs.	
Chapter 2 Reference 2.1.2 **Recommendation**	2.1.2 **Recommendation.—** *Aerodrome mapping data should be made available to the aeronautical information services for aerodromes deemed relevant by States where safety and/or performance-based operations suggest possible benefits.* *Note 1.— Aerodrome mapping databases related provisions are contained in Annex 15, Chapter 5 and PANS-AIM (Doc 10066), Chapter 5.* *Note 2.— Guidance material concerning the application of aerodrome mapping databases is provided in Attachment A, Section 22.*	CARs.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 2 Reference 2.1.3 **Standard**	2.1.3 Where made available in accordance with 2.1.2, the selection of the aerodrome mapping data features to be collected shall be made with consideration of the intended applications. *Note 1.— It is intended that the selection of the features to be collected match a defined operational need.* *Note 2.— Aerodrome mapping databases can be provided at one of two levels of quality — fine or medium. These levels and the corresponding numerical requirements are defined in RTCA Document DO-272B and European Organization for Civil Aviation Equipment (EUROCAE) Document ED-99C* — User Requirements for Aerodrome Mapping Information.	CARs.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 2 Reference 2.1.4 **Standard**	2.1.4 Digital data error detection techniques shall be used during the transmission and/or storage of aeronautical data and digital data sets. *Note.— Detailed specifications concerning digital data error detection techniques are contained in PANS-AIM (Doc 10066).*	CARs.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 2 Reference 2.5.2 **Standard**	2.5.2 The geographical coordinates of each threshold shall be measured and reported to the aeronautical information services authority in degrees, minutes, seconds and hundredths of seconds.	AC139-6, 2.4.2.	Less protective or partially implemented or not implemented	Measured to the nearest second only.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 2 Reference 2.5.3 **Standard**	2.5.3 The geographical coordinates of appropriate taxiway centre line points shall be measured and reported to the aeronautical information services authority in degrees, minutes, seconds and hundredths of seconds.	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 2 Reference 2.9.3 **Standard**	2.9.3 To facilitate compliance with 2.9.1 and 2.9.2, the following inspections shall be carried out each day: a) for the movement area, at least once where the aerodrome reference code number is 1 or 2 and at least twice where the aerodrome reference code number is 3 or 4; and b) for the runway(s), inspections in addition to a) whenever the runway surface conditions may have changed significantly due to meteorological conditions. *Note 1.— Procedures on carrying out daily inspections of the movement area are given in the PANS-Aerodromes (Doc 9981). Further guidance is available in the* Airport Services Manual *(Doc 9137), Part 8, in the* Manual of Surface Movement Guidance and Control Systems (SMGCS) *(Doc 9476) and in the* Advanced Surface Movement Guidance and Control Systems (A-SMGCS) Manual *(Doc 9830).* *Note 2.— The PANS-Aerodromes (Doc 9981) contains clarifications on the scope of a significant change in the runway surface conditions.*	AC139-3, 3.2 for a) and 4.2 for b).	Different in character or other means of compliance	The AC reference recommends two daily inspections, one before flight operations commence, and one at dusk when night operations are anticipated.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 2 Reference 2.13.2 **Standard**	2.13.2 Before introducing changes to the air navigation system, due account shall be taken by the services responsible for such changes of the time needed by aeronautical information services for the preparation, production and issue of relevant material for promulgation. To ensure timely provision of the information to aeronautical information services, close coordination between those services concerned is therefore required.	AC139-9, 4.2.	Different in character or other means of compliance	The AC provides generalised requirements for the provision of data, accuracy and timeliness of delivery to the AIS provider.	
Chapter 2 Reference 2.13.3 **Standard**	2.13.3 Of a particular importance are changes to aeronautical information that affect charts and/or computer-based navigation systems which qualify to be notified by the aeronautical information regulation and control (AIRAC) system, as specified in Annex 15, Chapter 6. The predetermined, internationally agreed AIRAC effective dates shall be observed by the responsible aerodrome services when submitting the raw information/data to aeronautical information services. *Note.— Detailed specifications concerning the AIRAC system are contained in PANS-AIM (Doc 10066), Chapter 6.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 2 Reference 2.13.4 **Standard**	2.13.4 The aerodrome services responsible for the provision of raw aeronautical information/data to the aeronautical information services shall do that while taking into account accuracy and integrity requirements necessary to meet the needs of the end-user of aeronautical data. *Note 1.— Specifications concerning the accuracy and integrity classification of aerodrome-related aeronautical data are contained in PANS-AIM (Doc 10066), Appendix 1.* *Note 2.— Specifications for the issue of NOTAM and SNOWTAM are contained in Annex 15, Chapter 6 and PANS-AIM (Doc 10066), Appendices 3 and 4, respectively.* *Note 3.— AIRAC information is distributed by the AIS at least 42 days in advance of the AIRAC effective dates with the objective of reaching recipients at least 28 days in advance of the effective date.* *Note 4.— The schedule of the predetermined internationally agreed AIRAC common effective dates at intervals of 28 days and guidance for the AIRAC use are contained in the* Aeronautical Information Services Manual *(Doc 8126, Chapter 2).*	AC139-9, 4.2.	Different in character or other means of compliance	The AC is not as specific, but covers the Standard anyway.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.1.2 **Recommendation**	3.1.2 **Recommendation.—** *The siting and orientation of runways at an aerodrome should, where possible, be such that the arrival and departure tracks minimize interference with areas approved for residential use and other noise-sensitive areas close to the aerodrome in order to avoid future noise problems.* *Note.— Guidance on how to address noise problems is provided in the* Airport Planning Manual *(Doc 9184), Part 2, and in* Guidance on the Balanced Approach to Aircraft Noise Management *(Doc 9829).*	CARs.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 3 Reference 3.1.5 **Recommendation**	***Location of threshold*** 3.1.5 **Recommendation.—** *A threshold should normally be located at the extremity of a runway unless operational considerations justify the choice of another location.* *Note.— Guidance on the siting of the threshold is given in Attachment A, Section 10.*	AC139-6, 3.1.4.	Different in character or other means of compliance	Threshold 60 m from approach surface inner edge; 30 m for Code 1 runway.	
Chapter 3 Reference 3.1.6 **Recommendation**	3.1.6 **Recommendation.—** *When it is necessary to displace a threshold, either permanently or temporarily, from its normal location, account should be taken of the various factors which may have a bearing on the location of the threshold. Where this displacement is due to an unserviceable runway condition, a cleared and graded area of at least 60 m in length should be available between the unserviceable area and the displaced threshold. Additional distance should also be provided to meet the requirements of the runway end safety area as appropriate.* *Note.— Guidance on factors which may be considered in the determination of the location of a displaced threshold is given in Attachment A, Section 10.*	AC139-6, 3.1.5.	Less protective or partially implemented or not implemented	Not specified in the AC.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.1.8.1 **Recommendation**	3.1.8 Secondary runway **Recommendation.—** *The length of a secondary runway should be determined similarly to primary runways except that it needs only to be adequate for those aeroplanes which require to use that secondary runway in addition to the other runway or runways in order to obtain a usability factor of at least 95 per cent.*	AC139-6, 3.1.7.	Less protective or partially implemented or not implemented	Usability factor not specified.	
Chapter 3 Reference 3.1.18.1 **Recommendation**	3.1.18 Distance between slope changes **Recommendation.—** *Undulations or appreciable changes in slopes located close together along a runway should be avoided. The distance between the points of intersection of two successive curves should not be less than:* *a) the sum of the absolute numerical values of the corresponding slope changes multiplied by the appropriate value as follows:* *— 30 000 m where the code number is 4;* *— 15 000 m where the code number is 3; and* *— 5 000 m where the code number is 1 or 2; or* *b) 45 m;* *whichever is greater.* *Note.— Guidance on implementing this specification is given in Attachment A, Section 4.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.3.10 **Recommendation**	3.3.10 **Recommendation.—** *The surface of a runway turn pad should be so constructed or resurfaced as to provide surface friction characteristics at least equal to that of the adjoining runway.*	AC139-6, 3.4.10.	Different in character or other means of compliance	The wording is "...as to provide good friction characteristics ..."	
Chapter 3 Reference 3.4.2 **Standard**	***Length of runway strips*** 3.4.2 A strip shall extend before the threshold and beyond the end of the runway or stopway for a distance of at least: — 60 m where the code number is 2, 3 or 4; — 60 m where the code number is 1 and the runway is an instrument one; and — 30 m where the code number is 1 and the runway is a non-instrument one.	CAR Part 139, App C, C.2.1.	Less protective or partially implemented or not implemented	60 m where the code number is 3 or 4; 30 m where the code number is 2, and 10 m where the code number is 1.	
Chapter 3 Reference 3.4.3 **Standard**	***Width of runway strips*** 3.4.3 A strip including a precision approach runway shall, wherever practicable, extend laterally to a distance of at least: — 140 m where the code number is 3 or 4; and — 70 m where the code number is 1 or 2; on each side of the centre line of the runway and its extended centre line throughout the length of the strip.	CAR Part 139, App C, C.2.2.	More Exacting or Exceeds	The rule applies the higher standards applicable prior to the applicability of Amendment 14.	Note: all international aerodromes, and all domestic aerodromes served by RPT exceed the current standard.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.4.4 **Recommendation**	3.4.4 **Recommendation.—** *A strip including a non-precision approach runway should extend laterally to a distance of at least:* — *140 m where the code number is 3 or 4; and* — *70 m where the code number is 1 or 2;* *on each side of the centre line of the runway and its extended centre line throughout the length of the strip.*	CAR Part 139, App C, C.2.2.	More Exacting or Exceeds	The rule applies the higher standards applicable prior to the applicability of Amendment 14.	Note: all international aerodromes, and all domestic aerodromes served by RPT exceed the current standard.
Chapter 3 Reference 3.4.12 **Recommendation**	3.4.12 **Recommendation.—** *Where the areas in 3.4.11 have paved surfaces, they should be able to withstand the occasional passage of the critical aeroplane for runway pavement design.*	AC139-6, 3.5.10.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 3 Reference 3.4.17 **Recommendation**	***Strength of runway strips*** 3.4.17 **Recommendation.—** *That portion of a strip of an instrument runway within a distance of at least:* — *75 m where the code number is 3 or 4; and* — *40 m where the code number is 1 or 2;* *from the centre line of the runway and its extended centre line should be so prepared or constructed as to minimize hazards arising from differences in load-bearing capacity to aeroplanes which the runway is intended to serve in the event of an aeroplane running off the runway.* *Note.— Guidance on preparation of runway strips is given in the* Aerodrome Design Manual *(Doc 9157), Part 1.*	AC139-6, 3.5.16.	Different in character or other means of compliance	The AC does not list specific distances, but adds a recommendation to strengthen the runway shoulders if large turbine aeroplanes use the runway.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.4.18 **Recommendation**	3.4.18 **Recommendation.—** *That portion of a strip containing a non-instrument runway within a distance of at least:* — *75 m where the code number is 3 or 4;* — *40 m where the code number is 2; and* — *30 m where the code number is 1;* *from the centre line of the runway and its extended centre line should be so prepared or constructed as to minimize hazards arising from differences in load-bearing capacity to aeroplanes which the runway is intended to serve in the event of an aeroplane running off the runway.*	AC139-6, 3.4.16.	Different in character or other means of compliance	The AC does not list specific distances, but adds a recommendation to strengthen the runway shoulders if large turbine aeroplanes use the runway.	
Chapter 3 Reference 3.5.1 **Standard**	**3.5 Runway end safety areas** ***General*** 3.5.1 A runway end safety area shall be provided at each end of a runway strip where: — the code number is 3 or 4; and — the code number is 1 or 2 and the runway is an instrument one. *Note.— Guidance on runway end safety areas is given in Attachment A, Section 9.*	CAR 139.51(b).	Different in character or other means of compliance	A RESA is required when - 1) the runway is ised for regular international air transport services; 2) the runway is used by regular air transport services by aroplanes with a (passenger) seating capacity greater than 30.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.5.2 **Recommendation**	3.5.2 **Recommendation.—** *A runway end safety area should be provided at each end of a runway strip where the code number is 1 or 2 and the runway is a non-instrument one.*	CAR 139.51(b).	Less protective or partially implemented or not implemented	The rule requirement does not extend to this level.	
Chapter 3 Reference 3.8.1 **Recommendation**	**3.8 Radio altimeter operating area** ***General*** 3.8.1 **Recommendation.—** *A radio altimeter operating area should be established in the pre-threshold area of a precision approach runway.*	CAR 139.51.	Less protective or partially implemented or not implemented	Not implemented.	
Chapter 3 Reference 3.8.2 **Recommendation**	***Length of the area*** 3.8.2 **Recommendation.—** *A radio altimeter operating area should extend before the threshold for a distance of at least 300 m.*	CAR 139.51.	Less protective or partially implemented or not implemented	Not implemented.	
Chapter 3 Reference 3.8.3 **Recommendation**	***Width of the area*** 3.8.3 **Recommendation.—** *A radio altimeter operating area should extend laterally, on each side of the extended centre line of the runway, to a distance of 60 m, except that, when special circumstances so warrant, the distance may be reduced to no less than 30 m if an aeronautical study indicates that such reduction would not affect the safety of operations of aircraft.*	CAR 139.51.	Less protective or partially implemented or not implemented	Not implemented.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 3 Reference 3.8.4 **Recommendation**	***Longitudinal slope changes*** 3.8.4 **Recommendation.—** *On a radio altimeter operating area, slope changes should be avoided or kept to a minimum. Where slope changes cannot be avoided, the slope changes should be as gradual as practicable and abrupt changes or sudden reversals of slopes avoided. The rate of change between two consecutive slopes should not exceed 2 per cent per 30 m.* *Note.— Guidance on radio altimeter operating area is given in Attachment A, Section 4.3, and in the* Manual of All-Weather Operations, *(Doc 9365), Section 5.2. Guidance on the use of radio altimeter is given in the PANS-OPS, Volume II, Part II, Section 1.*	CAR 139.51.	Less protective or partially implemented or not implemented	Not implemented.	
Chapter 3 Reference 3.13.5 **Recommendation**	3.13.5 **Recommendation.—** *On an aircraft stand the maximum slope should not exceed 1 per cent.*	AC139-6, 3.13.5.	More Exacting or Exceeds	Also requires down-slope to be away from terminal buildings.	
Chapter 4 Reference 4.1.9 **Standard**	4.1.9 The elevation of the inner edge shall be equal to the elevation of the midpoint of the threshold.	AC139-6, 4.1.13.	Different in character or other means of compliance	The elevation of the inner edge of the approach fan should be the same as the highest point on the extended centre line between the threshold and the inner edge.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 4 Reference 4.1.25 **Standard**	***Take-off climb surface*** 4.1.25 *Description.— Take-off climb surface.* An inclined plane or other specified surface beyond the end of a runway or clearway.	AC139-6, Figure 4-5.	Different in character or other means of compliance	Diagrammatic rather than textual description.	
Chapter 4 Reference 4.1.26 **Standard**	4.1.26 *Characteristics.—* The limits of the take-off climb surface shall comprise: a) an inner edge horizontal and perpendicular to the centre line of the runway and located either at a specified distance beyond the end of the runway or at the end of the clearway when such is provided and its length exceeds the specified distance; b) two sides originating at the ends of the inner edge, diverging uniformly at a specified rate from the take-off track to a specified final width and continuing thereafter at that width for the remainder of the length of the take-off climb surface; and c) an outer edge horizontal and perpendicular to the specified take-off track.	AC139-6, Figure 4-5.	Different in character or other means of compliance	Diagrammatic rather than textual description.	Note: the specified final width in b) is in AC139-6, Table 4-2.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 4 Reference 4.2.9 **Standard**	4.2.9 The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects: a) a horizontal plane 150 m above the threshold elevation; or b) the horizontal plane passing through the top of any object that governs the obstacle clearance altitude/height (OCA/H); whichever is the higher. **Table 4-1. Dimensions and slopes of obstacle limitation surfaces — Approach runways** APPROACH RUNWAYS	AC139-6, Ch 4.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 4 Reference 4.2.11 **Recommendation**	4.2.11 **Recommendation.—** *New objects or extensions of existing objects should not be permitted above the approach surface beyond 3 000 m from the inner edge, the conical surface or inner horizontal surface except when, in the opinion of the appropriate authority, the object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes*.	AC139-6, 4.2.5.	Less protective or partially implemented or not implemented	The 3000 m dimension is not specified.	
Chapter 4 Reference 4.2.17 **Standard**	4.2.17 The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects: a) a horizontal plane 150 m above the threshold elevation; or b) the horizontal plane passing through the top of any object that governs the obstacle clearance limit; whichever is the higher.	AC139-6, Ch 4.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 4 Reference 4.2.18 **Standard**	4.2.18 Fixed objects shall not be permitted above the inner approach surface, the inner transitional surface or the balked landing surface, except for frangible objects which because of their function must be located on the strip. Mobile objects shall not be permitted above these surfaces during the use of the runway for landing.	AC139-6, Ch 4.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 4 Reference 4.3.2 **Recommendation**	4.3.2 **Recommendation.—** *In areas beyond the limits of the obstacle limitation surfaces, at least those objects which extend to a height of 150 m or more above ground elevation should be regarded as obstacles, unless a special aeronautical study indicates that they do not constitute a hazard to aeroplanes.* *Note.— This study may have regard to the nature of operations concerned and may distinguish between day and night operations.*	CAR 77.19(a).	More Exacting or Exceeds	Applicable to structures 120 m or higher above ground level.	
Chapter 5 Reference 5.1.1.1 **Standard**	**CHAPTER 5. VISUAL AIDS FOR NAVIGATION** **5.1 Indicators and signalling devices** 5.1.1 Wind direction indicator ***Application*** 5.1.1.1 An aerodrome shall be equipped with at least one wind direction indicator.	CAR Part 139, App E, E.1(a). AC 139-6, 5.1.1 and 5.3.110.	More Exacting or Exceeds	One required adjacent to each paved runway threshold. AC also specifies ne required to the left of each runway or strip threshold, and to be illuminated at night (5.3.110).	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.1.1.4 **Recommendation**	5.1.1.4 **Recommendation.—** *The location of at least one wind direction indicator should be marked by a circular band 15 m in diameter and 1.2 m wide. The band should be centred about the wind direction indicator support and should be in a colour chosen to give adequate conspicuity, preferably white.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.1.1.5 **Recommendation**	5.1.1.5 **Recommendation.—** *Provision should be made for illuminating at least one wind indicator at an aerodrome intended for use at night.*	CAR Part 139, App E, E.1(b). AC139-6, 5.3.110.	More Exacting or Exceeds	The AC specification is for each to be illuminated.	
Chapter 5 Reference 5.1.3.2 **Recommendation**	***Characteristics*** 5.1.3.2 **Recommendation.—** *A signalling lamp should be capable of producing red, green and white signals, and of:* *a) being aimed manually at any target as required;* *b) giving a signal in any one colour followed by a signal in either of the two other colours; and* *c) transmitting a message in any one of the three colours by Morse Code up to a speed of at least four words per minute.* *When selecting the green light, use should be made of the restricted boundary of green as specified in Appendix 1, 2.1.2.*	CAR 172.57(b)(5)(ix); MATS EQP.	Less protective or partially implemented or not implemented	Colours only specified.	In practice, the lights currently used meet the recommended characteristics.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.1.3.3 **Recommendation**	5.1.3.3 **Recommendation.—** *The beam spread should be not less than 1° nor greater than 3°, with negligible light beyond 3°. When the signalling lamp is intended for use in the daytime the intensity of the coloured light should be not less than 6 000 cd.*	CAR 172.57(b)(5)(ix).	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.2.4.3 **Recommendation**	5.2.4.3 **Recommendation.—** *A threshold marking should be provided, so far as practicable, at the thresholds of an unpaved runway.* *Note.— The* Aerodrome Design Manual *(Doc 9157), Part 4, shows a form of marking which has been found satisfactory for the marking of downward slopes immediately before the threshold.*	AC139-7, 5.2.3.	Less protective or partially implemented or not implemented	Specification applies only to paved runways.	
Chapter 5 Reference 5.2.4.6 **Standard**	5.2.4.6 The stripes shall extend laterally to within 3 m of the edge of a runway or to a distance of 27 m on either side of a runway centre line, whichever results in the smaller lateral distance. Where a runway designation marking is placed within a threshold marking there shall be a minimum of three stripes on each side of the centre line of the runway. Where a runway designation marking is placed above a threshold marking, the stripes shall be continued across the runway. The stripes shall be at least 30 m long and approximately 1.80 m wide with spacings of approximately 1.80 m between them except that, where the stripes are continued across a runway, a double spacing shall be used to separate the two stripes nearest the centre line of the runway, and in the case where the designation marking is included within the threshold marking this spacing shall be 22.5 m.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not implemented.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.2.7.2 **Recommendation**	5.2.7.2 **Recommendation.—** *A runway side stripe marking should be provided on a precision approach runway irrespective of the contrast between the runway edges and the shoulders or the surrounding terrain*.	AC139-6, 5.2.39.	Less protective or partially implemented or not implemented	Specified only when there is inadequate visual differentiation between the edge of the runway and the shoulder.	
Chapter 5 Reference 5.2.7.4 **Recommendation**	5.2.7.4 **Recommendation.—** *Where a runway turn pad is provided, the runway side stripe marking should be continued between the runway and the runway turn pad.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.2.8.2 **Recommendation**	5.2.8.2 **Recommendation.—** *Taxiway centre line marking should be provided on a paved taxiway, de-icing/anti-icing facility and apron where the code number is 1 or 2 in such a way as to provide continuous guidance between the runway centre line and aircraft stands.*	AC139-6, 5.2.42.	Less protective or partially implemented or not implemented	Specified only for code 3 or 4.	
Chapter 5 Reference 5.2.8.9 **Standard**	5.2.8.9 Where provided: a) An enhanced taxiway centre line marking shall extend from the runway-holding position Pattern A (as defined in Figure 5-6, Taxiway markings) to a distance of up to 47 m in the direction of travel away from the runway. See Figure 5-7 (a).	AC139-6, 5.2.49.	Less protective or partially implemented or not implemented	Not specified except for a); the distance is 45 m instead of 47.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.2.10.2 **Standard**	***Characteristics*** 5.2.10.2 At an intersection of a taxiway and a non-instrument, non-precision approach or take-off runway, the runway-holding position marking shall be as shown in Figure 5-6, pattern A.	AC139-6, 5.2.61.	Less protective or partially implemented or not implemented	The AC reference omits the type of runway and the reference to pattern A.	
Chapter 5 Reference 5.2.10.3 **Standard**	5.2.10.3 Where a single runway-holding position is provided at an intersection of a taxiway and a precision approach category I, II or III runway, the runway-holding position marking shall be as shown in Figure 5-6, pattern A. Where two or three runway-holding positions are provided at such an intersection, the runway-holding position marking closer (closest) to the runway shall be as shown in Figure 5-6, pattern A and the markings farther from the runway shall be as shown in Figure 5-6, pattern B.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.10.4 **Standard**	5.2.10.4 The runway-holding position marking displayed at a runway-holding position established in accordance with 3.12.3 shall be as shown in Figure 5-6, pattern A.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.10.7 **Recommendation**	5.2.10.7 **Recommendation.—** *Where increased conspicuity of the runway-holding position is required, the dimensions of runway-holding position marking should be as shown in Figure 5-8, pattern A2 or pattern B2, as appropriate.* *Note.— An increased conspicuity of the runway-holding position can be required, notably to avoid incursion risks.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	This reference has been omitted in Rev 5 of the AC.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.2.10.8 **Recommendation**	5.2.10.8 **Recommendation.—** *Where a pattern B runway-holding position marking is located on an area where it would exceed 60 m in length, the term "CAT II" or "CAT III" as appropriate should be marked on the surface at the ends of the runway-holding position marking and at equal intervals of 45 m maximum between successive marks. The letters should be not less than 1.8 m high and should be placed not more than 0.9 m beyond the holding position marking.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.2.10.9 **Standard**	5.2.10.9 The runway-holding position marking displayed at a runway/runway intersection shall be perpendicular to the centre line of the runway forming part of the standard taxi-route. The pattern of the marking shall be as shown in Figure 5-8, pattern A2.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.11.2 **Recommendation**	5.2.11.2 **Recommendation.—** *An intermediate holding position marking should be displayed at the exit boundary of a remote de-icing/anti-icing facility adjoining a taxiway*.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.11.4 **Standard**	5.2.11.4 The distance between an intermediate holding position marking at the exit boundary of a remote de-icing/ anti-icing facility and the centre line of the adjoining taxiway shall not be less than the dimension specified in Table 3-1, column 11.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	This reference has been omitted in Rev 5 of the AC.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.2.12.6 **Recommendation**	5.2.12.6 **Recommendation.—** *A VOR aerodrome checkpoint marking should preferably be white in colour but should differ from the colour used for the taxiway markings.* *Note.— To provide contrast, markings may be bordered with black.*	AC139-6, 5.2.68 to 71.	Less protective or partially implemented or not implemented	No provision for different colour.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.13.1 **Recommendation**	5.2.13 Aircraft stand marking *Note.— Guidance on the layout of aircraft stand markings is contained in the* Aerodrome Design Manual *(Doc 9157), Part 4.* ***Application*** 5.2.13.1 **Recommendation.—** *Aircraft stand markings should be provided for designated parking positions on a paved apron and on a de-icing/anti-icing facility.*	AC139-6, 5.2.72.	Less protective or partially implemented or not implemented	No reference to de-icing facility.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.13.2 **Recommendation**	***Location*** 5.2.13.2 **Recommendation.—** *Aircraft stand markings on a paved apron and on a de-icing/anti-icing facility should be located so as to provide the clearances specified in 3.13.6 and in 3.15.9, respectively, when the nose wheel follows the stand marking.*	AC139-6, 5.2.73.	Less protective or partially implemented or not implemented	No reference to de-icing facility.	This reference has been omitted in Rev 5 of the AC.
Chapter 5 Reference 5.2.13.4 **Recommendation**	5.2.13.4 **Recommendation.—** *An aircraft stand identification (letter and/or number) should be included in the lead-in line a short distance after the beginning of the lead-in line. The height of the identification should be adequate to be readable from the cockpit of aircraft using the stand.*	AC139-6, 5.2.78.	Less protective or partially implemented or not implemented	No reference to height of identification.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.2.13.9 **Recommendation**	5.2.13.9 **Recommendation.—** *A turn bar should be located at right angles to the lead-in line, abeam the left pilot position at the point of initiation of any intended turn. It should have a length and width of not less than 6 m and 15 cm, respectively, and include an arrowhead to indicate the direction of turn.* *Note.— The distances to be maintained between the turn bar and the lead-in line may vary according to different aircraft types, taking into account the pilot's field of view.*	AC139-6, 5.2.82.	Different in character or other means of compliance	Abeam the nose wheel position at the point of initiation of any intended turn, rather than abeam the left pilot position.	
Chapter 5 Reference 5.2.13.12 **Recommendation**	5.2.13.12 **Recommendation.—** *A stop line should be located at right angles to the alignment bar, abeam the left pilot position at the intended point of stop. It should have a length and width of not less than 6 m and 15 cm, respectively.* *Note.— The distances to be maintained between the stop line and the lead-in line may vary according to different aircraft types, taking into account the pilot's field of view.*	AC139-6, 5.2.87.	Different in character or other means of compliance	Abeam the nose wheel stop block position at the intended point of stop, rather than abeam the left pilot position.	
Chapter 5 Reference 5.2.17.4 **Recommendation**	5.2.17.4 **Recommendation.—** *An information (location) marking should be displayed on the pavement surface at regular intervals along taxiways of great length.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.1.2 **Recommendation**	***Laser emissions which may endanger the safety of aircraft*** 5.3.1.2 **Recommendation.—** *To protect the safety of aircraft against the hazardous effects of laser emitters, the following protected zones should be established around aerodromes:* — *a laser-beam free flight zone (LFFZ)* — *a laser-beam critical flight zone (LCFZ)* — *a laser-beam sensitive flight zone (LSFZ).* *Note 1.— Figures 5-11, 5-12 and 5-13 may be used to determine the exposure levels and distances that adequately protect flight operations.* *Note 2.— The restrictions on the use of laser beams in the three protected flight zones, LFFZ, LCFZ and LSFZ, refer to visible laser beams only. Laser emitters operated by the authorities in a manner compatible with flight safety are excluded. In all navigable airspace, the irradiance level of any laser beam, visible or invisible, is expected to be less than or equal to the maximum permissible exposure (MPE) unless such emission has been notified to the authority and permission obtained.* *Note 3.— The protected flight zones are established in order to mitigate the risk of operating laser emitters in the vicinity of aerodromes.* *Note 4.— Further guidance on how to protect flight operations from the hazardous effects of laser emitters is contained in the* Manual on Laser Emitters and Flight Safety *(Doc 9815).* *Note 5.— See also Annex 11 —* Air Traffic Services, *Chapter 2.*	CAR 77.7(b).	Less protective or partially implemented or not implemented	Zones are not specified, but laser light operation in navigable airspace must be notified in advance to the Director.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.1.8 **Recommendation**	5.3.1.8 **Recommendation.—** *The temperature produced by conduction or radiation at the interface between an installed inset light and an aircraft tire should not exceed 160°C during a 10-minute period of exposure.* *Note.— Guidance on measuring the temperature of inset lights is given in the* Aerodrome Design Manual *(Doc 9157), Part 4.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.1.11 **Standard**	5.3.1.11 On the perimeter of and within the ellipse defining the main beam in Appendix 2, Figures A2-1 to A2-10, the maximum light intensity value shall not be greater than three times the minimum light intensity value measured in accordance with Appendix 2, collective notes for Figures A2-1 to A2-11 and A2-26, Note 2.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.1.12 **Standard**	5.3.1.12 On the perimeter of and within the rectangle defining the main beam in Appendix 2, Figures A2-12 to A2-20, the maximum light intensity value shall not be greater than three times the minimum light intensity value measured in accordance with Appendix 2, collective notes for Figures A2-12 to A2-21, Note 2.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.3.14 **Recommendation**	5.3.3.14 **Recommendation.—** *The speed of transmission should be between six and eight words per minute, the corresponding range of duration of the Morse dots being from 0.15 to 0.2 seconds per dot.*	AC139-6, 5.3.13.	Less protective or partially implemented or not implemented	Not specified.	No beacons of this type in New Zealand.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.5 **Recommendation**	5.3.4.5 **Recommendation.—** *If it is not physically possible to provide a centre line extending for a distance of 420 m from the threshold, it should be extended to 300 m so as to include the crossbar. If this is not possible, the centre line lights should be extended as far as practicable, and each centre line light should then consist of a barrette at least 3 m in length. Subject to the approach system having a crossbar at 300 m from the threshold, an additional crossbar may be provided at 150 m from the threshold.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not implemented.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.7 **Standard**	***Characteristics*** 5.3.4.7 The lights of a simple approach lighting system shall be fixed lights and the colour of the lights shall be such as to ensure that the system is readily distinguishable from other aeronautical ground lights, and from extraneous lighting if present. Each centre line light shall consist of either: a) a single source; or b) a barrette at least 3 m in length. *Note 1.— When the barrette as in b) is composed of lights approximating to point sources, a spacing of 1.5 m between adjacent lights in the barrette has been found satisfactory.* *Note 2.— It may be advisable to use barrettes 4 m in length if it is anticipated that the simple approach lighting system will be developed into a precision approach lighting system.* *Note 3.— At locations where identification of the simple approach lighting system is difficult at night due to surrounding lights, sequence flashing lights installed in the outer portion of the system may resolve this problem.*	AC139-6, 5.3.22.	Different in character or other means of compliance	The option of either a) or b) is not provided.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.9 **Recommendation**	5.3.4.9 **Recommendation.—** *Where provided for a non-precision approach runway, the lights should show at all angles in azimuth necessary to the pilot of an aircraft which on final approach does not deviate by an abnormal amount from the path defined by the non-visual aid. The lights should be designed to provide guidance during both day and night in the most adverse conditions of visibility and ambient light for which it is intended that the system should remain usable.*	AC139-6,5.3.23.	Different in character or other means of compliance	No reference to deviating by an abnormal amount on final approach.	
Chapter 5 Reference 5.3.4.10 **Standard**	***Precision approach category I lighting system*** ***Location*** 5.3.4.10 A precision approach category I lighting system shall consist of a row of lights on the extended centre line of the runway extending, wherever possible, over a distance of 900 m from the runway threshold with a row of lights forming a crossbar 30 m in length at a distance of 300 m from the runway threshold. *Note.— The installation of an approach lighting system of less than 900 m in length may result in operational limitations on the use of the runway. See Attachment A, Section 11.*	AC139-6, 5.3.32.	More Exacting or Exceeds	Five crossbars are specified.	
Chapter 5 Reference 5.3.4.15 **Standard**	5.3.4.15 Where the serviceability level of the approach lights specified as a maintenance objective in 10.5.10 can be demonstrated, each centre line light position may consist of either: a) a single light source; or b) a barrette.	AC139-6, Ch 5.	More Exacting or Exceeds	The alternative option is not provided for.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.21 **Standard**	5.3.4.21 The lights shall be in accordance with the specifications of Appendix 2, Figure A2-1. *Note.— The flight path envelopes used in the design of these lights are given in Attachment A, Figure A-6.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.4.22 **Standard**	***Precision approach category II and III lighting system*** ***Location*** 5.3.4.22 The approach lighting system shall consist of a row of lights on the extended centre line of the runway, extending, wherever possible, over a distance of 900 m from the runway threshold. In addition, the system shall have two side rows of lights, extending 270 m from the threshold, and two crossbars, one at 150 m and one at 300 m from the threshold, all as shown in Figure 5-14. Where the serviceability level of the approach lights specified as maintenance objectives in 10.5.7 can be demonstrated, the system may have two side rows of lights, extending 240 m from the threshold, and two crossbars, one at 150 m and one at 300 m from the threshold, all as shown in Figure 5-15. *Note.— The length of 900 m is based on providing guidance for operations under category I, II and III conditions. Reduced lengths may support category II and III operations but may impose limitations on category I operations. See Attachment A, Section 11.*	AC139-6, 5.3.40.	More Exacting or Exceeds	The alternative option to maintenance objectives in 10.5.7 is not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.24 **Standard**	5.3.4.24 The lights forming the side rows shall be placed on each side of the centre line, at a longitudinal spacing equal to that of the centre line lights and with the first light located 30 m from the threshold. Where the serviceability level of the approach lights specified as maintenance objectives in 10.5.7 can be demonstrated, lights forming the side rows may be placed on each side of the centre line, at a longitudinal spacing of 60 m with the first light located 60 m from the threshold. The lateral spacing (or gauge) between the innermost lights of the side rows shall be not less than 18 m nor more than 22.5 m, and preferably 18 m, but in any event shall be equal to that of the touchdown zone lights.	AC139-6, 5.3.40.	More Exacting or Exceeds	The alternative option to maintenance objectives in 10.4.7 is not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.30 **Standard**	***Characteristics*** 5.3.4.30 The centre line of a precision approach category II and III lighting system for the first 300 m from the threshold shall consist of barrettes showing variable white, except that, where the threshold is displaced 300 m or more, the centre line may consist of single light sources showing variable white. Where the serviceability level of the approach lights specified as maintenance objectives in 10.5.7 can be demonstrated, the centre line of a precision approach category II and III lighting system for the first 300 m from the threshold may consist of either: a) barrettes, where the centre line beyond 300 m from the threshold consists of barrettes as described in 5.3.4.32 a); or b) alternate single light sources and barrettes, where the centre line beyond 300 m from the threshold consists of single light sources as described in 5.3.4.32 b), with the innermost single light source located 30 m and the innermost barrette located 60 m from the threshold; or c) single light sources where the threshold is displaced 300 m or more; all of which shall show variable white.	AC139-6, 5.3.44.	More Exacting or Exceeds	The alternative option to maintenance objectives in 10.5.7 is not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.4.32 **Standard**	5.3.4.32 Where the serviceability level of the approach lights specified as maintenance objectives in 10.5.7 can be demonstrated, beyond 300 m from the threshold each centre line light position may consist of either: a) a barrette; or b) a single light source; all of which shall show variable white.	AC139-6, Ch 5.	More Exacting or Exceeds	The alternative option to maintenance objectives in 10.5.7 is not specified.	
Chapter 5 Reference 5.3.4.39 **Standard**	5.3.4.39 The lights shall be in accordance with the specifications of Appendix 2, Figures A2-1 and A2-2. *Note.— The flight path envelopes used in the design of these lights are given in Attachment A, Figure A-6.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.5.6 **Recommendation**	5.3.5.6 **Recommendation.—** *Where a runway threshold is temporarily displaced from the normal position and one or more of the conditions specified in 5.3.5.1 exist, a PAPI should be provided except that where the code number is 1 or 2 an APAPI may be provided.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not provided for.	
Chapter 5 Reference 5.3.6.4 **Recommendation**	***Characteristics*** 5.3.6.4 **Recommendation.—** *Circling guidance lights should be fixed or flashing lights of an intensity and beam spread adequate for the conditions of visibility and ambient light in which it is intended to make visual circling approaches. The flashing lights should be white, and the steady lights either white or gaseous discharge lights.*	AC139-6, 5.3.114.	Different in character or other means of compliance	The reference recommends amber lights.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.7.4 **Recommendation**	***Characteristics*** 5.3.7.4 **Recommendation.—** *Each group of lights of a runway lead-in lighting system should consist of at least three flashing lights in a linear or cluster configuration. The system may be augmented by steady burning lights where such lights would assist in identifying the system.*	AC139-6, 5.3.119.	Different in character or other means of compliance	The main lights of lead-in lighting should be fixed intensity red. The line of lead-in lights should be provided either with 2 amber portal beacons at the outer limit of the line, or the outermost light of the line will be amber. These outer limit lights may be either fixed or flashing.	
Chapter 5 Reference 5.3.7.5 **Recommendation**	5.3.7.5 **Recommendation.—** *The flashing lights and the steady burning lights should be white.*	AC139-6, 5.3.119.	Different in character or other means of compliance	The main lights of lead-in lighting should be fixed intensity red. The line of lead-in lights should be provided either with 2 amber portal beacons at the outer limit of the line or the outermost light of the line will be amber. These outer limit lights may be either fixed or flashing.	
Chapter 5 Reference 5.3.7.6 **Recommendation**	5.3.7.6 **Recommendation.—** *Where practicable, the flashing lights in each group should flash in sequence towards the runway.*	AC139-6, 5.3.119.	Less protective or partially implemented or not implemented	Not implemented.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.8.1 **Recommendation**	5.3.8 Runway threshold identification lights ***Application*** 5.3.8.1 **Recommendation.—** *Runway threshold identification lights should be installed:* *a) at the threshold of a non-precision approach runway when additional threshold conspicuity is necessary or where it is not practicable to provide other approach lighting aids; and* *b) where a runway threshold is permanently displaced from the runway extremity or temporarily displaced from the normal position and additional threshold conspicuity is necessary.*	AC139-6, 5.3.120.	Less protective or partially implemented or not implemented	b) not implemented.	
Chapter 5 Reference 5.3.9.10 **Standard**	5.3.9.10 Runway edge lights on a precision approach runway shall be in accordance with the specifications of Appendix 2, Figure A2-9 or A2-10.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.10.10 **Standard**	5.3.10.10 Runway threshold lights on a precision approach runway shall be in accordance with the specifications of Appendix 2, Figure A2-3.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.10.11 **Standard**	5.3.10.11 Threshold wing bar lights on a precision approach runway shall be in accordance with the specifications of Appendix 2, Figure A2-4.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.11.5 **Standard**	5.3.11.5 Runway end lights on a precision approach runway shall be in accordance with the specifications of Appendix 2, Figure A2-8.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.12.5 **Standard**	***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 m or greater, the longitudinal spacing may be approximately 30 m. *Note.— Existing centre line lighting where lights are spaced at 7.5 m need not be replaced.*	AC139-6, 5.3.142.	Different in character or other means of compliance	Logitudinal spacing of 7.5 m or 15 m for a precision approach runway Category III; 7.5 m, 15 m or 30 m for a precision approach runway Category II or other runway on which the lights are provided. No reference to maintenance objectives in 10.4.7 or 10.4.11.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.12.6 **Recommendation**	5.3.12.6 **Recommendation.—** *Centre line guidance for take-off from the beginning of a runway to a displaced threshold should be provided by:* *a) an approach lighting system if its characteristics and intensity settings afford the guidance required during take-off and it does not dazzle the pilot of an aircraft taking off; or* *b) runway centre line lights; or* *c) barrettes of at least 3 m in length and spaced at uniform intervals of 30 m, as shown in Figure 5-23, designed so that their photometric characteristics and intensity setting afford the guidance required during take-off without dazzling the pilot of an aircraft taking off.* *Where necessary, provision should be made to extinguish those centre line lights specified in b) or reset the intensity of the approach lighting system or barrettes when the runway is being used for landing. In no case should only the single source runway centre line lights show from the beginning of the runway to a displaced threshold when the runway is being used for landing.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not provided for.	
Chapter 5 Reference 5.3.12.8 **Standard**	5.3.12.8 Runway centre line lights shall be in accordance with the specifications of Appendix 2, Figure A2-6 or A2-7.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.13.4 **Recommendation**	5.3.13.4 **Recommendation.—** *A barrette should be not less than 3 m nor more than 4.5 m in length.*	AC139-6, 5.3.147.	Different in character or other means of compliance	Not more than 4 m in length.	
Chapter 5 Reference 5.3.13.6 **Standard**	5.3.13.6 Touchdown zone lights shall be in accordance with the specifications of Appendix 2, Figure A2-5.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.14.1 **Recommendation**	5.3.14 Simple touchdown zone lights *Note.— The purpose of simple touchdown zone lights is to provide pilots with enhanced situational awareness in all visibility conditions and to help enable pilots to decide whether to commence a go-around if the aircraft has not landed by a certain point on the runway. It is essential that pilots operating at aerodromes with simple touchdown zone lights be familiar with the purpose of these lights.* ***Application*** 5.3.14.1 **Recommendation.—** *Except where TDZ lights are provided in accordance with paragraph 5.3.13, at an aerodrome where the approach angle is greater than 3.5 degrees and/or the Landing Distance Available combined with other factors increases the risk of an overrun, simple touchdown zone lights should be provided.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.14.2 **Standard**	***Location*** 5.3.14.2 Simple touchdown zone lights shall be a pair of lights located on each side of the runway centre line 0.3 m beyond the upwind edge of the final touchdown zone marking. The lateral spacing between the inner lights of the two pairs of lights shall be equal to the lateral spacing selected for the touchdown zone marking. The spacing between the lights of the same pair shall not be more than 1.5 m or half the width of the touchdown zone marking, whichever is greater. (See Figure 5-24.)	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.14.3 **Recommendation**	5.3.14.3 **Recommendation.—** *Where provided on a runway without TDZ markings, simple touchdown zone lights should be installed in such a position that provides the equivalent TDZ information.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.14.4 **Standard**	***Characteristics*** 5.3.14.4 Simple touchdown zone lights shall be fixed unidirectional lights showing variable white, aligned so as to be visible to the pilot of a landing aeroplane in the direction of approach to the runway.	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.14.5 **Standard**	5.3.14.5 Simple touchdown zone lights shall be in accordance with the specifications in Appendix 2, Figure A2-5. *Note.— As a good operating practice, simple touchdown zone lights are supplied with power on a separate circuit to other runway lighting so that they may be used when other lighting is switched off.* **Figure 5-24. Simple touchdown zone lighting**	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.15.1 **Recommendation**	5.3.15 Rapid exit taxiway indicator lights *Note.— The purpose of rapid exit taxiway indicator lights (RETILs) is to provide pilots with distance-to-go information to the nearest rapid exit taxiway on the runway, to enhance situational awareness in low visibility conditions and enable pilots to apply braking action for more efficient roll-out and runway exit speeds. It is essential that pilots operating at aerodromes with runway(s) displaying rapid exit taxiway indicator lights be familiar with the purpose of these lights.* ***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 m and/or where the traffic density is heavy.* *Note.— See Attachment A, Section 14.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.15.2 **Standard**	5.3.15.2 Rapid exit taxiway indicator lights shall not be displayed in the event of any lamp failure or other failure that prevents the display of the light pattern depicted in Figure 5-25, in full.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.15.3 **Standard**	***Location*** 5.3.15.3 A set of rapid exit taxiway indicator lights shall be located on the runway on the same side of the runway centre line as the associated rapid exit taxiway, in the configuration shown in Figure 5-25. In each set, the lights shall be located 2 m apart and the light nearest to the runway centre line shall be displaced 2 m from the runway centre line.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.15.4 **Standard**	5.3.15.4 Where more than one rapid exit taxiway exists on a runway, the set of rapid exit taxiway indicator lights for each exit shall not overlap when displayed.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.15.5 **Standard**	***Characteristics*** 5.3.15.5 Rapid exit taxiway indicator lights shall be fixed unidirectional yellow lights, aligned so as to be visible to the pilot of a landing aeroplane in the direction of approach to the runway.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.15.6 **Standard**	5.3.15.6 Rapid exit taxiway indicator lights shall be in accordance with the specifications in Appendix 2, Figure A2-6 or Figure A2-7, as appropriate.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.15.7 **Recommendation**	5.3.15.7 **Recommendation.—** *Rapid exit taxiway indicator lights should be supplied with power on a separate circuit to other runway lighting so that they may be used when other lighting is switched off.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.16.2 **Standard**	***Location*** 5.3.16.2 Stopway lights shall be placed along the full length of the stopway and shall be in two parallel rows that are equidistant from the centre line and coincident with the rows of the runway edge lights. Stopway lights shall also be provided across the end of a stopway on a line at right angles to the stopway axis as near to the end of the stopway as possible and, in any case, not more than 3 m outside the end.	AC139-6, 5.3.152.	More Exacting or Exceeds	Specification is for nine lights across the end of the stopway for a precision approach runway Category I, II or III, or at least six lights for other runways.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.2 **Recommendation**	5.3.17.2 **Recommendation.—** *Taxiway centre line lights should be provided on a taxiway intended for use at night in runway visual range conditions of 350 m or greater, and particularly on complex taxiway intersections and exit taxiways, except that these lights need not be provided where the traffic density is light and taxiway edge lights and centre line marking provide adequate guidance.* *Note.— Where there may be a need to delineate the edges of a taxiway, e.g. on a rapid exit taxiway, narrow taxiway or in snow conditions, this may be done with taxiway edge lights or markers.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.17.5 **Recommendation**	5.3.17.5 **Recommendation.—** *Taxiway centre line lights should be provided in all visibility conditions on a runway forming part of a standard taxi-route where specified as components of an advanced surface movement guidance and control system.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	No reference to runway forming part of a standard taxi route.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.7 **Standard**	5.3.17.7 Taxiway centre line lights on an exit taxiway shall be fixed lights. Alternate taxiway centre line lights shall show green and yellow from their beginning near the runway centre line to the perimeter of the ILS/MLS critical/sensitive area or the lower edge of the inner transitional surface, whichever is farthest from the runway; and thereafter all lights shall show green (Figure 5-26). The first light in the exit centre line shall always show green, and the light nearest to the perimeter shall always show yellow. *Note 1.— Care is necessary to limit the light distribution of green lights on or near a runway so as to avoid possible confusion with threshold lights.* *Note 2.— For yellow filter characteristics see Appendix 1, 2.2.* *Note 3.— The size of the ILS/MLS critical/sensitive area depends on the characteristics of the associated ILS/MLS and other factors. Guidance is provided in Annex 10, Volume I, Attachments C and G.* *Note 4.— See 5.4.3 for specifications on runway vacated signs.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.8 **Recommendation**	5.3.17.8 **Recommendation.—** *Where it is necessary to denote the proximity to a runway, taxiway centre line lights should be fixed lights showing alternating green and yellow from the perimeter of the ILS/MLS critical/sensitive area or the lower edge of the inner transitional surface, whichever is farthest from the runway, to the runway and continue alternating green and yellow until:* *a) their end point near the runway centre line; or* *b) in the case of the taxiway centre line lights crossing the runway, to the opposite perimeter of the ILS/MLS critical/sensitive area or the lower edge of the inner transitional surface, whichever is farthest from the runway.* *Note 1.— Care is necessary to limit the light distribution of green lights on or near a runway so as to avoid possible confusion with threshold lights.* *Note 2.— The provisions of 5.3.17.8 can form part of effective runway incursion prevention measures.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.17.9 **Standard**	5.3.17.9 Taxiway centre line lights shall be in accordance with the specifications of: a) Appendix 2, Figure A2-12, A2-13, or A2-14, for taxiways intended for use in runway visual range conditions of less than a value of 350 m; and b) Appendix 2, Figure A2-15 or A2-16, for other taxiways.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.10 **Recommendation**	5.3.17.10 **Recommendation.—** *Where higher intensities are required, from an operational point of view, taxiway centre line lights on rapid exit taxiways intended for use in runway visual range conditions less than a value of 350 m should be in accordance with the specifications of Appendix 2, Figure A2-12. The number of levels of brilliancy settings for these lights should be the same as that for the runway centre line lights.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.17.11 **Recommendation**	5.3.17.11 **Recommendation.—** *Where taxiway centre line lights are specified as components of an advanced surface movement guidance and control system and where, from an operational point of view, higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, taxiway centre line lights should be in accordance with the specifications of Appendix 2, Figure A2-17, A2-18 or A2-19.* *Note.— High-intensity centre line lights should only be used in case of an absolute necessity and following a specific study.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.13 **Recommendation**	***Taxiway centre line lights on taxiways*** ***Location*** 5.3.17.13 **Recommendation.—** *Taxiway centre line lights on a straight section of a taxiway should be spaced at longitudinal intervals of not more than 30 m, except that:* *a) larger intervals not exceeding 60 m may be used where, because of the prevailing meteorological conditions, adequate guidance is provided by such spacing;* *b) intervals less than 30 m should be provided on short straight sections; and* *c) on a taxiway intended for use in RVR conditions of less than a value of 350 m, the longitudinal spacing should not exceed 15 m.*	AC139-6, 5.3.162.	Different in character or other means of compliance	Precision approach Category III specified, rather than the RVR value in item c).	
Chapter 5 Reference 5.3.17.14 **Recommendation**	5.3.17.14 **Recommendation.—** *Taxiway centre line lights on a taxiway curve should continue from the straight portion of the taxiway at a constant distance from the outside edge of the taxiway curve. The lights should be spaced at intervals such that a clear indication of the curve is provided.*	AC139-6, 5.3.162.	Different in character or other means of compliance	Spacing of 7.5 m on curves specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.15 **Recommendation**	5.3.17.15 **Recommendation.—** *On a taxiway intended for use in RVR conditions of less than a value of 350 m, the lights on a curve should not exceed a spacing of 15 m, and on a curve of less than 400 m radius the lights should be spaced at intervals of not greater than 7.5 m. This spacing should extend for 60 m before and after the curve.* *Note 1.— Spacings on curves that have been found suitable for a taxiway intended for use in RVR conditions of 350 m or greater are:* Curve radius — Light spacing *up to 400 m — 7.5 m* *401 m to 899 m — 15 m* *900 m or greater — 30 m.* *Note 2.— See 3.9.5 and Figure 3-2.*	AC139-6, 5.3.162.	Less protective or partially implemented or not implemented	Not specified, except for 7.5. m spacing on curves.	
Chapter 5 Reference 5.3.17.17 **Recommendation**	5.3.17.17 **Recommendation.—** *The lights should be spaced at longitudinal intervals of not more than 15 m, except that, where runway centre line lights are not provided, a greater interval not exceeding 30 m may be used.*	AC139-6, 5.3.163.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.17.18 **Recommendation**	***Taxiway centre line lights on other exit taxiways*** ***Location*** 5.3.17.18 **Recommendation.—** *Taxiway centre line lights on exit taxiways other than rapid exit taxiways should commence at the point where the taxiway centre line marking begins to curve from the runway centre line, and follow the curved taxiway centre line marking at least to the point where the marking leaves the runway. The first light should be at least 60 cm from any row of runway centre line lights, as shown in Figure 5-27.*	AC139-6, 5.3.164.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.17.20 **Recommendation**	***Taxiway centre line lights on runways*** ***Location*** 5.3.17.20 **Recommendation.—** *Taxiway centre line lights on a runway forming part of a standard taxi-route and intended for taxiing in runway visual range conditions less than a value of 350 m should be spaced at longitudinal intervals not exceeding 15 m.*	AC139-6, 5.3.163.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.19.7 **Standard**	5.3.19.7 Runway turn pad lights shall be in accordance with the specifications of Appendix 2, Figure A2-13, A2-14 or A2-15, as appropriate.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.20.3 **Recommendation**	5.3.20.3 **Recommendation.—** *A stop bar should be provided at an intermediate holding position when it is desired to supplement markings with lights and to provide traffic control by visual means.*	AC139-6, 5.3.175.	Different in character or other means of compliance	Specified for runway holding position used in conjunction with a precision approach runway category II or III.	
Chapter 5 Reference 5.3.20.9 **Standard**	5.3.20.9 The intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications in Appendix 2, Figures A2-12 through A2-16, as appropriate.	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.20.10 **Recommendation**	5.3.20.10 **Recommendation.—** *Where stop bars are specified as components of an advanced surface movement guidance and control system and where, from an operational point of view, higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights should be in accordance with the specifications of Appendix 2, Figure A2-17, A2-18 or A2-19.* *Note.— High-intensity stop bars should only be used in case of an absolute necessity and following a specific study.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.20.11 **Recommendation**	5.3.20.11 **Recommendation.—** *Where a wide beam fixture is required, the intensity in red light and beam spreads of stop bar lights should be in accordance with the specifications of Appendix 2, Figure A2-17 or A2-19.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.20.12 **Standard**	5.3.20.12 The lighting circuit shall be designed so that: a) stop bars located across entrance taxiways are selectively switchable; b) stop bars located across taxiways intended to be used only as exit taxiways are switchable selectively or in groups; c) when a stop bar is illuminated, any taxiway centre line lights installed beyond the stop bar shall be extinguished for a distance of at least 90 m; and d) stop bars are interlocked with the taxiway centre line lights so that when the centre line lights beyond the stop bar are illuminated the stop bar is extinguished and vice versa. *Note.— Care is required in the design of the electrical system to ensure that all of the lights of a stop bar will not fail at the same time. Guidance on this issue is given in the* Aerodrome Design Manual *(Doc 9157), Part 5.*	AC139-6, 5.3.175.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.23.8 **Recommendation**	5.3.23.8 **Recommendation.—** *Where there is a need to enhance the contrast between the on and off state of runway guard lights, Configuration A, intended for use during the day, a visor of sufficient size to prevent sunlight from entering the lens without interfering with the function of the fixture should be located above each lamp.* *Note.— Some other device or design, e.g. specially designed optics, may be used in lieu of the visor.*	AC139-6, 5.3.192.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.23.11 **Recommendation**	5.3.23.11 **Recommendation.—** *The intensity in yellow light and beam spreads of lights of Configuration A should be in accordance with the specifications in Appendix 2, Figure A2-24.*	AC139-6, 5.3.192.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.23.12 **Recommendation**	5.3.23.12 **Recommendation.—** *Where runway guard lights are intended for use during the day, the intensity in yellow light and beam spreads of lights of Configuration A should be in accordance with the specifications in Appendix 2, Figure A2-25.*	AC139-6, 5.3.192.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.23.13 **Recommendation**	5.3.23.13 **Recommendation.—** *Where runway guard lights are specified as components of an advanced surface movement guidance and control system where higher light intensities are required, the intensity in yellow light and beam spreads of lights of Configuration A should be in accordance with the specifications in Appendix 2, Figure A2 -25.* *Note.— Higher light intensities may be required to maintain ground movement at a certain speed in low visibilities.*	AC139-6, 5.3.192.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.23.14 **Recommendation**	5.3.23.14 **Recommendation.—** *The intensity in yellow light and beam spreads of lights of Configuration B should be in accordance with the specifications in Appendix 2, Figure A2-12.*	AC139-6, 5.3.185.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.23.15 **Recommendation**	5.3.23.15 **Recommendation.—** *Where runway guard lights are intended for use during the day, the intensity in yellow light and beam spreads of lights of Configuration B should be in accordance with the specifications in Appendix 2, Figure A2-20.*	AC139-6, 5.3.192.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.23.16 **Recommendation**	5.3.23.16 **Recommendation.—** *Where runway guard lights are specified as components of an advanced surface movement guidance and control system where higher light intensities are required, the intensity in yellow light and beam spreads of lights of Configuration B should be in accordance with the specifications in Appendix 2, Figure A2 -20.*	AC139-6, 5.3.192.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.25.18 **Recommendation**	5.3.25.18 **Recommendation.—** *The stopping position indicator should provide closing rate information over a distance of at least 10 m.*	AC139-6, 5.3.212 to 215.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.25.19 **Standard**	5.3.25.19 When stopping guidance is indicated by colour change, green shall be used to show that the aircraft can proceed and red to show that the stop point has been reached ,except that for a short distance prior to the stop point a third colour may be used to warn that the stopping point is close.	AC139-6, 5.3.212 to 215.	Less protective or partially implemented or not implemented	Third colour not provided for.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.29.1 **Recommendation**	5.3.29 No-entry bar *Note.— Runway incursions may take place in all visibility or weather conditions. The use of no-entry bars can form part of effective runway incursion prevention measures.* ***Application*** 5.3.29.1 **Recommendation.—** *A no-entry bar should be provided across a taxiway which is intended to be used as an exit only taxiway to assist in preventing inadvertent access of traffic to that taxiway.*	AC139-6, Ch 5.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.29.2 **Recommendation**	***Location*** 5.3.29.2 **Recommendation.—** *A no-entry bar should be located across the taxiway at the end of an exit only taxiway where it is desired to prevent traffic from entering the taxiway in the wrong direction.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.29.4 **Recommendation**	***Characteristics*** 5.3.29.4 **Recommendation.—** *A no-entry bar should consist of unidirectional lights spaced at uniform intervals of no more than 3 m showing red in the intended direction(s) of approach to the runway.* *Note.— Where necessary to enhance conspicuity, extra lights are installed uniformly.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.3.29.5 **Recommendation**	5.3.29.5 **Recommendation.—** *A pair of elevated lights should be added to each end of the no-entry bar where the in-pavement no entry bar lights might be obscured from a pilot's view, for example, by snow or rain, or where a pilot may be required to stop the aircraft in a position so close to the lights that they are blocked from view by the structure of the aircraft.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.29.6 **Standard**	5.3.29.6 The intensity in red light and beam spreads of no-entry bar lights shall be in accordance with the specifications in Appendix 2, Figures A2-12 through A2-16, as appropriate.	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.29.7 **Recommendation**	5.3.29.7 **Recommendation.—** *Where no-entry bars are specified as components of an advanced surface movement guidance and control system and where, from an operational point of view, higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of no-entry bar lights should be in accordance with the specifications of Appendix 2, Figure A2-17, A2-18 or A2-19.* *Note.— High-intensity no-entry bars are typically used only in case of an absolute necessity and following a specific study.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.3.29.8 **Recommendation**	5.3.29.8 **Recommendation.—** *Where a wide beam fixture is required, the intensity in red light and beam spreads of no-entry bar lights should be in accordance with the specifications of Appendix 2, Figure A2-17 or A2-19.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 5 Reference 5.4.2.13 **Recommendation**	5.4.2.13 **Recommendation.—** *Where, owing to environmental or other factors, the conspicuity of the inscription on a mandatory instruction sign needs to be enhanced, the outside edge of the white inscription should be supplemented by a black outline measuring 10 mm in width for runway code numbers 1 and 2, and 20 mm in width for runway code numbers 3 and 4.*	AC139-6, 5.4.23.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 5 Reference 5.5.5.3 **Standard**	***Characteristics*** 5.5.5.3 A taxiway edge marker shall be retroreflective blue.	AC139-6, 5.5.12.	Less protective or partially implemented or not implemented	Blue not specified.	
Chapter 6 Reference 6.1.1.9 **Recommendation**	6.1.1.9 **Recommendation.—** *Other objects inside the obstacle limitation surfaces should be marked and/or lighted if an aeronautical study indicates that the object could constitute a hazard to aircraft (this includes objects adjacent to visual routes e.g. waterway or highway).* *Note.— See note accompanying 4.4.2.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 6 Reference 6.1.2.2 **Recommendation**	6.1.2.2 **Recommendation.—** *Other objects outside the obstacle limitation surfaces should be marked and/or lighted if an aeronautical study indicates that the object could constitute a hazard to aircraft (this includes objects adjacent to visual routes e.g. waterway, highway).*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 6 Reference 6.2.2.6 **Standard**	6.2.2.6 Low-intensity obstacle lights, Type C, displayed on vehicles associated with emergency or security shall be flashing-blue and those displayed on other vehicles shall be flashing-yellow.	AC139-6, Table 6-2.	Different in character or other means of compliance	In New Zealand, flashing red generally denotes fire, ambulance or aviation security; flashing red/blue is police; flashing yellow is used bu service vehicles.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 6 Reference 6.2.2.8 **Standard**	6.2.2.8 Low-intensity obstacle lights on objects with limited mobility such as aerobridges shall be fixed-red, and as a minimum be in accordance with the specifications for low-intensity obstacle lights, Type A, in Table 6-1. The intensity of the lights shall be sufficient to ensure conspicuity considering the intensity of the adjacent lights and the general levels of illumination against which they would normally be viewed.	AC139-6, Ch 6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 6 Reference 6.2.3.16 **Standard**	6.2.3.16 High-intensity obstacle lights, Type A, and medium-intensity obstacle lights, Types A and B, located on an object shall flash simultaneously.	AC139-6, 6.2.33.	Less protective or partially implemented or not implemented	Only high-intensity llights are mentioned.	
Chapter 6 Reference 6.2.4.5 **Recommendation**	6.2.4.5 **Recommendation.—** *Where lighting is deemed necessary for a single wind turbine or short line of wind turbines, the installation should be in accordance with 6.2.4.3 e) or as determined by an aeronautical study.*	AC139-6, Ch 6.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 7 Reference 7.4.4 **Standard**	***Characteristics of unserviceability lights*** 7.4.4 An unserviceability light shall consist of a red fixed light. The light shall have an intensity sufficient to ensure conspicuity considering the intensity of the adjacent lights and the general level of illumination against which it would normally be viewed. In no case shall the intensity be less than 10 cd of red light.	AC139-6, 7.4.4.	Less protective or partially implemented or not implemented	Either fixed red or yellow flahing. Minimum intensity 5 cd.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 7 Reference 7.4.7 **Recommendation**	***Characteristics of unserviceability marker boards*** 7.4.7 **Recommendation.—** *An unserviceability marker board should be at least 0.5 m in height and 0.9 m in length, with alternate red and white or orange and white vertical stripes.*	AC139-6, 7.4.7.	Different in character or other means of compliance	Marker board should not exceed 0.9 m in witdh. If more than 3 m in length, the stripes are required.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 8 Reference 8.1.10 **Recommendation**	8.1.10 **Recommendation.—** *The following aerodrome facilities should be provided with a secondary power supply capable of supplying power when there is a failure of the primary power supply:* *a) the signalling lamp and the minimum lighting necessary to enable air traffic services personnel to carry out their duties;* *Note.— The requirement for minimum lighting may be met by other than electrical means.* *b) all obstacle lights which, in the opinion of the appropriate authority, are essential to ensure the safe operation of aircraft;* *c) approach, runway and taxiway lighting as specified in 8.1.6 to 8.1.9;* *d) meteorological equipment;* *e) essential security lighting, if provided in accordance with 9.11;* *f) essential equipment and facilities for the aerodrome responding emergency agencies;* *g) floodlighting on a designated isolated aircraft parking position if provided in accordance with 5.3.24.1; and* *h) illumination of apron areas over which passengers may walk.* *Note.— Specifications for secondary power supply for radio navigation aids and ground elements of communications systems are given in Annex 10, Volume I,*	AC139-6, 8.1.1.	Less protective or partially implemented or not implemented	Items e) and h) not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
	Chapter 2.				
Chapter 8 Reference 8.3.3 **Recommendation**	8.3.3 **Recommendation.—** *Where a change in the operational status of lights has occurred, an indication should be provided within two seconds for a stop bar at a runway-holding position and within five seconds for all other types of visual aids.*	CAR Part 139, Appendix H, Table H-1.	Different in character or other means of compliance	The switch-over times vary according to the type of runway. For a precision approach category II/III runway the times are 1 second for the inner 300 m of the approach lights, all runway lights, and all stop bars. All others (eg, obstacles, essential taxiways) 15 seconds.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.1 **Standard**	**9.2 Rescue and firefighting** ***General*** *Introductory Note.— The principal objective of a rescue and firefighting service is to save lives in the event of an aircraft accident or incident occurring at, or in the immediate vicinity of, an aerodrome. The rescue and firefighting service is provided to create and maintain survivable conditions, to provide egress routes for occupants and to initiate the rescue of those occupants unable to make their escape without direct aid. The rescue may require the use of equipment and personnel other than those assessed primarily for rescue and firefighting purposes.* *The most important factors bearing on effective rescue in a survivable aircraft accident are: the training received, the effectiveness of the equipment and the speed with which personnel and equipment designated for rescue and firefighting purposes can be put into use.* *Requirements to combat building and fuel farm fires, or to deal with foaming of runways, are not taken into account.* ***Application*** 9.2.1 Rescue and firefighting equipment and services shall be provided at an aerodrome when serving commercial air transport operations. *Note.— Public or private organizations, suitably located and equipped, may be designated to provide the rescue and firefighting service. It is intended that the fire station housing these organizations be normally located on the aerodrome, although an off-aerodrome location is not precluded provided the response time can be met.*	CAR 139.111.	Different in character or other means of compliance	Required at certificated aerodromes during regular air transport operations by aeroplanes having a certified seating capacity of more than 30 passengers.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.3 **Standard**	***Level of protection to be provided*** 9.2.3 The level of protection provided at an aerodrome for rescue and firefighting shall be appropriate to the aerodrome category determined using the principles in 9.2.5 and 9.2.6, except that, where the number of movements of the aeroplanes in the highest category normally using the aerodrome is less than 700 in the busiest consecutive three months, the level of protection provided shall be not less than one category below the determined category. *Note.— Either a take-off or a landing constitutes a movement.*	CAR 139.59.	Less protective or partially implemented or not implemented	Not specified	
Chapter 9 Reference 9.2.4 **Recommendation**	9.2.4 **Recommendation.—** *The level of protection provided at an aerodrome for rescue and firefighting should be equal to the aerodrome category determined using the principles in 9.2.5 and 9.2.6.*	CAR 139.59.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.11 **Standard**	9.2.11 The amounts of water for foam production and the complementary agents to be provided on the rescue and firefighting vehicles shall be in accordance with the aerodrome category determined under 9.2.3, 9.2.4, 9.2.5, 9.2.6 and Table 9-2, except that for aerodrome categories 1 and 2 up to 100 per cent of the water may be substituted with complementary agent. For the purpose of agent substitution, 1 kg of complementary agent shall be taken as equivalent to 1.0 L of water for production of a foam meeting performance level A. *Note 1.— The amounts of water specified for foam production are predicated on an application rate of 8.2 L/min/m2 for a foam meeting performance level A, 5.5 L/min/m2 for a foam meeting performance level B and 3.75 L/min/m2 for a foam meeting performance level C.* *Note 2.— When any other complementary agent is used, the substitution ratios need to be checked.*	CAR Part 139, Table 2; AC139-4, 6.4.	More Exacting or Exceeds	No provision for substitution, although the equivalent units are given in the AC.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.12 **Standard**	9.2.12 At aerodromes where operations by aeroplanes larger than the average size in a given category are planned, the quantities of water shall be recalculated and the amount of water for foam production and the discharge rates for foam solution shall be increased accordingly. *Note.— Guidance on the determination of quantities of water and discharge rates based on the largest overall length of aeroplane in a given category is available in Chapter 2 of the* Airport Services Manual *(Doc 9137), Part 1.* **Table 9-2. Minimum usable amounts of extinguishing agents**	CAR 139.59.	Different in character or other means of compliance	Notes 1 and 2 to the rule provide a means to raise the RFF category by 1 for aeroplanes of greater than average size.	
Chapter 9 Reference 9.2.16 **Recommendation**	9.2.16 **Recommendation.—** *When a combination of different performance level foams are provided at an aerodrome, the total amount of water to be provided for foam production should be calculated for each foam type and the distribution of these quantities should be documented for each vehicle and applied to the overall rescue and firefighting requirement.*	AC139-4, 6.4.	Different in character or other means of compliance	Specification is to meet or exceed ICAO performance level B.	
Chapter 9 Reference 9.2.18 **Standard**	9.2.18 The complementary agents shall comply with the appropriate specifications of the International Organization for Standardization (ISO).* --- * See ISO Publication 7202 (Powder).	AC139-4, 6.1.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.22 **Recommendation**	9.2.22 **Recommendation.—** *A reserve supply of complementary agent, equivalent to 100 per cent of the quantity identified in Table 9-2, should be maintained on the aerodrome for vehicle replenishment purposes. Sufficient propellant gas should be included to utilize this reserve complementary agent.*	CAR 139.61.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 9 Reference 9.2.23 **Recommendation**	9.2.23 **Recommendation.—** *Category 1 and 2 aerodromes that have replaced up to 100 per cent of the water with complementary agent should hold a reserve supply of complementary agent of 200 per cent.*	CAR 139.61.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 9 Reference 9.2.24 **Recommendation**	9.2.24 **Recommendation.—** *Where a major delay in the replenishment of the supplies is anticipated, the amount of reserve supply in 9.2.21, 9.2.22 and 9.2.23 should be increased as determined by a risk assessment.* *Note.— See the* Airport Services Manual *(Doc 9137), Part 1 for guidance on the conduct of a risk analysis to determine the quantities of reserve extinguishing agents*.	CAR 139.61.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 9 Reference 9.2.27 **Recommendation**	9.2.27 **Recommendation.—** *The operational objective of the rescue and firefighting service should be to achieve a response time not exceeding two minutes to any point of each operational runway, in optimum visibility and surface conditions.*	CAR 139.67.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.29 **Recommendation**	9.2.29 **Recommendation.—** *To meet the operational objective as nearly as possible in less than optimum conditions of visibility, especially during low visibility operations, suitable guidance, equipment and/or procedures for rescue and firefighting services should be provided.* *Note.— Additional guidance is available in the* Airport Services Manual *(Doc 9137), Part 1.*	CAR 139.67.	Less protective or partially implemented or not implemented	Not specifically provided for.	
Chapter 9 Reference 9.2.31 **Recommendation**	9.2.31 **Recommendation.—** *Any vehicles, other than the first responding vehicles(s), required to deliver the amounts of extinguishing agents specified in Table 9-2 should ensure continuous agent application and should arrive no more than three minutes from the initial call.*	CAR 139.67.	Less protective or partially implemented or not implemented	Four minutes as per 9.2.31.	
Chapter 9 Reference 9.2.33 **Recommendation**	***Emergency access roads*** 9.2.33 **Recommendation.—** *Emergency access roads should be provided on an aerodrome where terrain conditions permit their construction, so as to facilitate achieving minimum response times. Particular attention should be given to the provision of ready access to approach areas up to 1 000 m from the threshold, or at least within the aerodrome boundary. Where a fence is provided, the need for convenient access to outside areas should be taken into account.* *Note.— Aerodrome service roads may serve as emergency access roads when they are suitably located and constructed.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.2.34 **Recommendation**	9.2.34 **Recommendation.—** *Emergency access roads should be capable of supporting the heaviest vehicles which will use them, and be usable in all weather conditions. Roads within 90 m of a runway should be surfaced to prevent surface erosion and the transfer of debris to the runway. Sufficient vertical clearance should be provided from overhead obstructions for the largest vehicles.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 9 Reference 9.2.35 **Recommendation**	9.2.35 **Recommendation.—** *When the surface of the road is indistinguishable from the surrounding area, or in areas where snow may obscure the location of the roads, edge markers should be placed at intervals of about 10 m.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 9 Reference 9.2.36 **Recommendation**	***Fire stations*** 9.2.36 **Recommendation.—** *All rescue and firefighting vehicles should normally be housed in a fire station. Satellite fire stations should be provided whenever the response time cannot be achieved from a single fire station.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	Note: standard practice (except no requirement to provide satellite fire stations).
Chapter 9 Reference 9.2.37 **Recommendation**	9.2.37 **Recommendation.—** *The fire station should be located so that the access for rescue and firefighting vehicles into the runway area is direct and clear, requiring a minimum number of turns.*	CAR 139.111.	Less protective or partially implemented or not implemented	Not specified.	Applied in practice.
Chapter 9 Reference 9.2.39 **Recommendation**	9.2.39 **Recommendation.—** *An alerting system for rescue and firefighting personnel, capable of being operated from that station, should be provided at a fire station, any other fire station on the aerodrome and the aerodrome control tower.*	AC139-14, B.1.	Less protective or partially implemented or not implemented	Not specified, although discussed in reference.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.4.1 **Standard**	**9.4 Wildlife strike hazard reduction** *Note.— The presence of wildlife (birds and other animals) on, or in the vicinity of an aerodrome poses a serious threat to aircraft operational safety.* 9.4.1 The wildlife strike hazard on, or in the vicinity of, an aerodrome shall be assessed through: a) the establishment of a national procedure for recording and reporting wildlife strikes to aircraft; b) the collection of information from aircraft operators, aerodrome personnel and other sources on the presence of wildlife on or around the aerodrome constituting a potential hazard to aircraft operations; and c) an ongoing evaluation of the wildlife hazard by competent personnel. *Note.— See Annex 15, Chapter 5.*	CAR 12.55(c); CAR 139.71.	Less protective or partially implemented or not implemented	Rule 12.55(c) provides the mechanism for reporting bird incidents, but 139.71, although requiring an environmental management programme to minimize wildlife hazards, does not provide for the requirements of b) or c).	
Chapter 9 Reference 9.4.4 **Standard**	9.4.4 The appropriate authority shall take action to eliminate or to prevent the establishment of garbage disposal dumps or any other source which may attract wildlife to the aerodrome, or its vicinity, unless an appropriate wildlife assessment indicates that they are unlikely to create conditions conducive to a wildlife hazard problem. Where the elimination of existing sites is not possible, the appropriate authority shall ensure that any risk to aircraft posed by these sites is assessed and reduced to as low as reasonably practicable.	CAR 139.71.	Less protective or partially implemented or not implemented	No specific mention of garbage disposal dumps.	Note: guidance material available on CAANZ web site www.caa.govt.nz/aerodromes.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.5.3 **Standard**	9.5.3 An apron management service shall be provided with radiotelephony communications facilities.	CAR 139.115.	Less protective or partially implemented or not implemented	Not specifically stated, although standard practice.	
Chapter 9 Reference 9.5.4 **Standard**	9.5.4 Where low visibility procedures are in effect, persons and vehicles operating on an apron shall be restricted to the essential minimum. *Note.— Guidance on related special procedures is given in the* Manual of Surface Movement Guidance and Control Systems (SMGCS) *(Doc 9476).*	CAR 139.125.	Less protective or partially implemented or not implemented	Not specified.	Note: applies only to Auckland (NZAA). Aerodrome operator has low visibilty operations procedures in place.
Chapter 9 Reference 9.5.6 **Standard**	9.5.6 A vehicle operating on an apron shall: a) give way to an emergency vehicle; an aircraft taxiing, about to taxi, or being pushed or towed; and b) give way to other vehicles in accordance with local regulations.	CAR 139.119, 172.77(6).	Less protective or partially implemented or not implemented	The rules require an aerodrome operator and an aerodrome control service provider to establish procedures, but do not state the specifics of this Standard.	
Chapter 9 Reference 9.5.7 **Standard**	9.5.7 An aircraft stand shall be visually monitored to ensure that the recommended clearance distances are provided to an aircraft using the stand. *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.*	AC139-6, Ch 3.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.6.1 **Standard**	**9.6 Ground servicing of aircraft** 9.6.1 Fire extinguishing equipment suitable for at least initial intervention in the event of a fuel fire and personnel trained in its use shall be readily available during the ground servicing of an aircraft, and there shall be a means of quickly summoning the rescue and firefighting service in the event of a fire or major fuel spill.	CARs.	Less protective or partially implemented or not implemented	Not specified in rules.	
Chapter 9 Reference 9.6.2 **Standard**	9.6.2 When aircraft refuelling operations take place while passengers are embarking, on board or disembarking, ground equipment shall be positioned so as to allow: a) the use of a sufficient number of exits for expeditious evacuation; and b) a ready escape route from each of the exits to be used in an emergency.	CAR 121.91(a).	Different in character or other means of compliance	The rule requires the aircraft operator to ensure that safety and evacuation precautions are taken in accordance with the operator's exposition.	
Chapter 9 Reference 9.7.2 **Standard**	9.7.2 The driver of a vehicle on the movement area shall comply with all mandatory instructions conveyed by markings and signs unless otherwise authorized by: a) the aerodrome control tower when on the manoeuvring area; or b) the appropriate designated authority when on the apron.	CAR 139.119.	Different in character or other means of compliance	The rule requires an aerodrome operator to have procedures in place to control ground vehicle movements.	
Chapter 9 Reference 9.7.3 **Standard**	9.7.3 The driver of a vehicle on the movement area shall comply with all mandatory instructions conveyed by lights.	CAR 139.119.	Different in character or other means of compliance	The rule requires an aerodrome operator to have procedures in place to control ground vehicle movements.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.7.4 **Standard**	9.7.4 The driver of a vehicle on the movement area shall be appropriately trained for the tasks to be performed and shall comply with the instructions issued by: a) the aerodrome control tower, when on the manoeuvring area; and b) the appropriate designated authority, when on the apron.	CAR 139.119.	Different in character or other means of compliance	The rule requires an aerodrome operator to have procedures in place to control ground vehicle movements.	
Chapter 9 Reference 9.7.5 **Standard**	9.7.5 The driver of a radio-equipped vehicle shall establish satisfactory two-way radio communication with the aerodrome control tower before entering the manoeuvring area and with the appropriate designated authority before entering the apron. The driver shall maintain a continuous listening watch on the assigned frequency when on the movement area.	CAR 139.119(2).	Different in character or other means of compliance	The rule requires an aerodrome operator to have procedures in place to control ground vehicle movements.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.9.2 **Standard**	9.9.2 Any equipment or installation required for air navigation or for aircraft safety purposes which must be located: a) on that portion of a runway strip within: 1) 75 m of the runway centre line where the code number is 3 or 4; or 2) 45 m of the runway centre line where the code number is 1 or 2; or b) on a runway end safety area, a taxiway strip or within the distances specified in Table 3-1; or c) on a clearway and which would endanger an aircraft in the air; shall be frangible and mounted as low as possible.	AC139-6, 8.4.3.	Different in character or other means of compliance	The frangibility requirements apply to: any equipment or installation required for air navigation purposes which must be located on or near a strip of a precision approach runway Category I, II or III and which: (a) situated on that portion of the strip within 77.5 m of the runway centre line where the code number is 4 and the code letter is F; or (b) is situated within 240m from the end of the strip and within: (i) 60 m of the runway centre line where the code number is 3 or 4; or (ii) 45 m of the runway centre line where the code number is 1 or 2; or (c) penetrates the inner approach surface, the inner transitional surface or the balked landing surface.	
Chapter 9 Reference 9.10.5 **Recommendation**	9.10.5 **Recommendation.—** *When greater security is thought necessary, a cleared area should be provided on both sides of the fence or barrier to facilitate the work of patrols and to make trespassing more difficult. Consideration should be given to the provision of a perimeter road inside the aerodrome fencing for the use of both maintenance personnel and security patrols.*	CAR 139.203.	Less protective or partially implemented or not implemented	Not specified.	Applied in practice where necessary.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 9 Reference 9.11.1 **Recommendation**	**9.11 Security lighting** **Recommendation.—** *At an aerodrome where it is deemed desirable for security reasons, a fence or other barrier provided for the protection of international civil aviation and its facilities should be illuminated at a minimum essential level. Consideration should be given to locating lights so that the ground area on both sides of the fence or barrier, particularly at access points, is illuminated.*	CAR 139.203.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 1 Reference 10.1.2 **Recommendation**	10.1.2 **Recommendation.—** *The design and application of the maintenance programme should observe human factors principles*. *Note 1.— Guidance material on human factors principles can be found in the* Human Factors Training Manual *(Doc 9683) and in the* Airport Services Manual *(Doc 9137), Part 8.* *Note 2.— General principles and procedures on the training of aerodrome personnel, including training programmes and competence checks, are specified in the PANS-Aerodromes (Doc 9981).*	CAR 139.103.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 1 Reference 10.2.2 **Standard**	10.2.2 The surface of a runway shall be maintained in a condition such as to prevent formation of harmful irregularities. *Note.— See Attachment A, Section 5.*	CAR 139.103(b)(2).	Different in character or other means of compliance	Rule requires operator to maintain the surface of paved runways in a condition so as to provide good friction characteristics and low rolling resistance.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 1 Reference 10.3.1 **Standard**	**10.3 Removal of contaminants** 10.3.1 Snow, slush, ice, standing water, mud, dust, sand, oil, rubber deposits and other contaminants shall be removed from the surface of runways in use as rapidly and completely as possible to minimize accumulation. *Note.— The above requirement does not imply that winter operations on compacted snow and ice are prohibited. Information on snow removal and ice control and removal of other contaminants is given in the PANS-Aerodromes (Doc 9981).*	CAR 139.103(b).	Different in character or other means of compliance	Not specified to this level of detail, but the intent is the same.	
Chapter 1 Reference 10.3.2 **Recommendation**	10.3.2 **Recommendation.—** *Taxiways should be kept clear of snow, slush, ice, etc., to the extent necessary to enable aircraft to be taxied to and from an operational runway.*	CAR 139.103.	Less protective or partially implemented or not implemented	Not specifically required.	Carried out in practice when necessary.
Chapter 1 Reference 10.3.3 **Recommendation**	10.3.3 **Recommendation.—** *Aprons should be kept clear of snow, slush, ice, etc., to the extent necessary to enable aircraft to manoeuvre safely or, where appropriate, to be towed or pushed.*	CAR 139.103.	Less protective or partially implemented or not implemented	Not specifically required.	Carried out in practice when necessary.

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 1 Reference 10.3.4 **Recommendation**	10.3.4 **Recommendation.—** *Whenever the clearance of snow, slush, ice, etc., from the various parts of the movement area cannot be carried out simultaneously, the order of priority after the runway(s) in use should be set in consultation with the affected parties such as rescue and firefighting service and documented in a snow plan.* *Note.— See PANS-AIM (Doc 10066), Appendix 2, Part 3, AD 1.2.2 for information to be promulgated in an AIP concerning a snow plan. The* Aeronautical Information Services Manual *(Doc 8126) contains guidance on the description of a snow plan including general policy concerning operational priorities established for the clearance of movement areas.*	CAR 139.103.	Less protective or partially implemented or not implemented	Not specified at this level of detail.	
Chapter 1 Reference 10.3.5 **Recommendation**	10.3.5 **Recommendation.—** *Chemicals to remove or to prevent the formation of ice and frost on aerodrome pavements should be used when conditions indicate their use could be effective. Caution should be exercised in the application of the chemicals so as not to create a more slippery condition.* *Note.— Information on the use of chemicals for aerodrome pavements is given in the PANS-Aerodromes (Doc 9981).*	CAR 139.103.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 1 Reference 10.3.6 **Standard**	10.3.6 Chemicals which may have harmful effects on aircraft or pavements, or chemicals which may have toxic effects on the aerodrome environment, shall not be used.	CAR 139.103.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 1 Reference 10.4.1 **Standard**	**10.4 Runway pavement overlays** *Note.— The following specifications are intended for runway pavement overlay projects when the runway is to be returned temporarily to an operational status before resurfacing is complete. This may necessitate a temporary ramp between the new and old runway surfaces. Guidance on overlaying pavements and assessing their operational status is given in the* Aerodrome Design Manual *(Doc 9157), Part 3.* 10.4.1 The longitudinal slope of the temporary ramp, measured with reference to the existing runway surface or previous overlay course, shall be: a) 0.5 to 1.0 per cent for overlays up to and including 5 cm in thickness; and b) not more than 0.5 per cent for overlays more than 5 cm in thickness.	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 1 Reference 10.4.2 **Recommendation**	10.4.2 **Recommendation.—** *Overlaying should proceed from one end of the runway toward the other end so that based on runway utilization most aircraft operations will experience a down ramp.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 1 Reference 10.4.3 **Recommendation**	10.4.3 **Recommendation.—** *The entire width of the runway should be overlaid during each work session.*	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	

Annex Reference	AERODROMES Standard or Recommended Practice	State Legislation, Regulation or Document Reference	Level of implementation of SARP's	Text of the difference to be notified to ICAO	Comments including the reason for the difference
Chapter 1 Reference 10.4.4 **Standard**	10.4.4 Before a runway being overlaid is returned to a temporary operational status, a runway centre line marking conforming to the specifications in Section 5.2.3 shall be provided. Additionally, the location of any temporary threshold shall be identified by a 3.6 m wide transverse stripe.	CAR Part 139.	Less protective or partially implemented or not implemented	Not specified.	
Chapter 1 Reference 10.4.5 **Recommendation**	10.4.5 **Recommendation.—** *The overlay should be constructed and maintained above the minimum friction level specified in 10.2.3.*	AC139-6.	Less protective or partially implemented or not implemented	Not specified.	

- END -