ANNEX D

Summary of proposed changes to the Part 139 MOS

Proposed changes are divided into three categories:

E = editorial/correction/clarification

O = omission

S = change made to existing Standard

Changes are set out in three columns. The first column sets out the proposed changes and is shown in red (on electronic/web based document). The second column denotes the category of change and the last column provides the reasons for the change.

Note: This change summary has been mapped against the existing Part 139 MOS. It largely follows the current standard provision-by-provision and highlights the proposed amendment, the reason and then references the revised location in the draft Part 139 MOS instrument.

Where a paragraph or subsection within the existing Part 139 MOS has not been specifically referenced within the following table, it means the general intent has been preserved in the proposed Part 139 MOS, subject to minor editorial changes.

PROPOSED AMENDMENT	CODE	REASONS	NEW REFERENCE
General: Numerous editorials due to the MOS being reissued.	E	 Due to the sheer volume of changes, the existing MOS would be repealed and reissued in its entirety. Note: This affects cross-referencing and document numbering, which must align with the current legislative drafting standards. In line with the project policy, useful narrative and supporting guidance within the existing MOS would be moved outside of the MOS and into dedicated guidance materials, including Advisory Circulars. Note: The existing suite of Advisory Circulars would subsequently be reviewed and republished prior to the commencement date of this proposed MOS amendment 	
General: Numerous omissions due to the re-issue of the MOS. Chapters, subsections and paragraphs that are not required in accordance with the new project policy would be omitted. Note: Where these omissions are significant, a specific reference would be made in this table.	0	A MOS can only contain standards. Educational and narrative material, with the exception of essential notes provided 'in situ' to the standards, would be moved to advisory circulars and other guidance materials.	
1.1 Rewritten.	S	This subsection has been rewritten to support the revised structure of the Part 139 MOS.	Part 1

1.1.2 Clarifies when figures in the MOS constitute part of the standard by adding the following term to the figure heading: 'showing matters.' When 'illustrating matters' is used in a figure heading, the figure is only intended to provide general information or guidance.	E	Industry has previously sought clarification as to when the figures and diagrams in the existing MOS are considered as a standard.	Section 1.05
General: Section 1.2 definitions would be updated.	E	Definitions require an update to ensure all existing and new provisions in the Part 139 MOS are appropriately defined.	Section 2.01 and Part 3
 1.2 Definition for 'upgrades' updated to include: when the aerodrome can facilitate take-offs and aerodrome surface movements below 550 RVR when the aerodrome operator chooses to renominate the capability of its facilities to a higher reference code. Other requirements related to the application of standards and grandfathering would be clarified in line with the revised policy. 	S	The change needs to clarify 'what' would constitute an upgrade before the new standard need to be 'triggered' elsewhere in the MOS - in order to ensure safe operations are maintained. The aerodrome operator, however, is free to choose when these upgrades apply - based on either a business decision to upgrade their infrastructure or a renomination of their facility to a higher reference code or operational capability.	Section 2.01
2.1.1 and 2.1.2 Modified to ensure this new MOS would apply (subject to the established transition period) with the exception of grandfathered facilities or a CASA direction.	S	Introduced in order to 'grandfather' movement area facilities (and the related visual aids) to the existing standards until the facility is upgraded or replaced.	Sections 2.02 - 2.03
New standard: CASA directions with regard to upgrades.	S	These provisions already exist through Part 11 of CASR, however the current drafting style requires these to be referenced in the Part 139 MOS. If such a provision is used by CASA, it must be made in writing with an explanation provided to justify why the direction is required.	Section 2.04

 2.1.3 Expanded and relocated to a new subsection - this now includes a generic 'approval' provision in addition to existing exemption powers available to CASA under CASR Part 11. Note: PANS Aerodromes information would be incorporated into guidance under Part 139 to explain how aerodrome operators can complete a safety assessment for non-compliant facilities. 	S	This addresses the existing challenge with industry having to seek a renewal of any exemptions requires for enduring facilities which do not comply with the MOS. This change can also provide additional flexibility with the application of the MOS to non-compliant facilities, subject to a safety assessment being accepted by CASA.	Section 2.05
2.1.4 Removed.	0	Part 139 cannot comment upon other standards or regulations prescribed by external government or statutory authorities.	
 2.1.5 Expanded to include the new ICAO 'Aerodrome Reference Code' format. The existing aerodrome reference code letter table has been divided into three separate components - one for aeroplane reference field length, one for wingspan and one for outer main gear wheel span. 	S	These changes align with future proposals to amend Annex 14 Volume I. This change clarifies which aspect of the code letter can be nominated by the aerodrome operator for a particular facility on the movement area.	Section 4.01
2.1.6 Removed.	0	Narrative and not a standard.	

2.1.9A Removed.	0	 Contains details regarding CASA procedures that are not an aerodrome standard. CASA would still attempt to notify authorised designers in such cases, however responsibility would still reside with: Part 173 designers—to monitor the procedures they design; and Aerodrome operators—to advise the designers of their terminal instrument flight procedures in the case that their authorisation ceases to exist. 	
2.1.10 and 2.1.11 Removed.	0	The provision of a truncated (reduced length) approach lighting system would be included in the MOS and allowed in cases where CASA agrees in writing. The aerodrome operator would now nominate the capability of their facility through their aerodrome manual and AIP. It would then be up to the Part 173 certified designer to ensure the aerodrome is suitable before a SA CAT I and SA CAT II procedure (or other) is developed.	Subsection 9.01 (5)
Chapter 3 Removed.	0	All of the former licenced aerodromes now either hold a certificate or are registered. For the proposed transition, similar details would be addressed in the future certification procedures, which would likely form part of a dedicated process manual and/or guidance material.	
Chapter 4 Removed.	0	All of the existing aerodromes would be transitioned to holding a certificate via separate instructions and/or guidance materials.	

Updated standard: Reporting of information to AIP. 5.1.2 and 5.1.3 would be rewritten.	S	Rewritten in line with the new Part 175 of CASR and to support the Aerodromes Data Product Specification provided by the AIS (currently managed by Airservices). Content currently published in the AIP that is not covered in the existing Part 139 MOS or the Aerodromes Data Product Specification would be included in the revised Part139 MOS. Any duplication between Parts 139 and 175 of CASR would be removed. For aerodrome data that must be published in the AIP, these updated provisions replace the existing Part 3 of the aerodrome manual, as currently defined in Appendix 1 to regulation 139.095 of CASR.	Part 5 Divisions 1 and 2
5.2 The majority of the existing content is intended to be subsequently moved to supporting guidance materials with the	0	Educational in nature and not a standard.	
exception of the supporting figures that explain the calculation of declared distances.			
5.3	0	Educational in nature and not a standard.	
The majority of existing content to be subsequently moved to supporting guidance materials.			
6.1.1	0	Educational in nature and not a standard.	
Content to be moved to supporting guidance materials.			
6.2.1	E	The required interface of the OLS and PANS-OPS surfaces with the threshold location was not clear	Section 6.01
The displacement of a threshold due to OLS and/or PANS-OPS infringements has been clarified.			

6.2.2 Length of runway requirements has been removed.	0	The aerodrome operator is required to nominate their runway length based on the intended aircraft activity. Once published, the aircraft operator decides if it is safe to use.	
6.2.3	S	Annex 14, Volume I (pending) amendment.	Section 6.02
Runway width standards changed to align with the new proposed Annex 14, Volume I amendment.			
The new runway width table would be linked to a combination of code number and outer main gear wheel span.			
Aligned with the proposed amendment to Annex 14, Volume I. References to 60 m wide runways would be removed as they would only be applied to aircraft with an outer main gear wheel span greater than 15 m (which aren't common to commercial use).			
6.2.4	S	Annex 14, Volume I (pending) amendment.	Section 6.03
The subsection heading would be changed to reflect the correct ICAO term. Minimum clearance requirements between the outer main gear wheel and the edge of turning area (on the runway) would be changed to align with the new proposed Annex 14, Volume I amendment.		Standards for shoulders need to be revised to cover the case where the intended aircraft would otherwise have their turbine engines travel outside of the sealed area.	
6.2.5	s	The term 'GAAP aerodromes' no longer exists.	Section 6.04
Amended to remove reference to GAAP aerodromes.			
6.2.6 Provision allowing aerodrome operators to exceed the maximum longitudinal slope when tying into an existing runway or taxiway intersection - provided no adverse hazard is created and the decision is documented.	S	Response to industry feedback based on current issues experienced when either designing new infrastructure or providing overlays on existing infrastructure.	Section 6.05

6.2.7Runway minimum sight distances would be clarified based on different reference codes and operational categories (day/night).A cross reference has been provided in Section 9.64 in the proposed Part 139 MOS.	E	Industry request for clarification. The refined standard is more clearly based on aircraft size and the required application to runway end light visibility at night.	Section 6.06
6.2.8 Provision included to allow aerodrome operators to exceed maximum transverse slopes when tying in to an existing runway or taxiway intersection - provided no adverse hazard is created and decision is documented.	S	Response to industry feedback based on current issues experienced when either designing new infrastructure or providing overlays on existing infrastructure.	Section 6.07
 6.2.9 Revised to an outcome based standard. Covers either the provision of 1mm texture depth (ICAO Annex 14 recommendation) or an alternative surface treatment/design which achieves the minimum design and maintenance friction level. Sand patch tests would be included to verify 1mm texture depth (on condition). Some existing material would be moved to supporting guidance materials. Runway and runway strip surface standards for grass gravel or natural surfaces would be clarified. 	S	Response to industry feedback based on current issues experienced when either designing new infrastructure or providing overlays on existing infrastructure. Proposal links runway friction monitoring requirements with the provision and maintenance of runway surface friction. Attempts would be made to resolve industry questions regarding required maintenance practices for existing sealed pavements. Attempts would be made to resolve industry questions regarding maintenance practices for existing usealed pavements.	Section 6.08
6.2.10 Removed	0	Standards are already addressed in Part 5. The remainder of the content was educational in nature and not a standard.	

6.2.11 - 6.2.14	S	Annex 14, Volume I (pending) amendment.	Sections 6.10-6.12
Shoulder requirements would be changed to align with the new proposed Annex 14, Volume I amendment based on outer main gear wheel span. The revised standard is dependent upon aircraft designs with multiple engines which would not otherwise be contained by standard runway or runway shoulder width. Differences in slopes against different reference codes have now been consolidated into an overall range: A new increased slope at 5% for the initial 3m of the shoulder, out from the runway edge, is proposed.		Standards for runway shoulder need to be revised to cover the case where the intended aircraft would otherwise have their turbine engines travel outside of the sealed area. The revised standard however is not more constraining than the existing standard. The consolidation of existing standards has followed industry feedback. Industry had also requested an increased slope for the first 3m of shoulder out from the runway edge.	
 6.2.15 - 6.2.24 Runway strip requirements would be changed to align with the new proposed Annex 14, Volume I amendment. Provision is included to allow aerodrome operators to exceed maximum transverse and longitudinal slopes when tying in to an existing runway or taxiway strips - provided no adverse hazard is created and the decision is documented. Allowable step up and step down along edge of runway or runway shoulder and within the graded runway strip further qualified. 	S	Annex 14, Volume I (pending) amendment. Consolidation of existing standards based on industry feedback. Industry through feedback had requested that the existing 25mm tolerance allowed for the edges of some aerodrome facilities be made permissible for other applications within the manoeuvring area.	Sections 6.13-6.23
New standard: Runway strip availability. Provision now clarifies when the aerodrome operator makes runway strips available for aircraft use and to what standard they need to be maintained.	S	Clarifies the current ambiguity between aerodrome and aircraft operational standards - where aircraft incorrectly use the runway strips when not permitted by the aerodrome operator.	Section 6.24

6.2.25 - 6.2.29	S	Annex 14, Volume I alignment.	Section 6.25
 Minor revisions would be made to the existing standard to require all new and upgraded Code 3 and 4 runways provide a 90m RESA. Under current standards, Code 3 and 4 runways could initially plan to provide a 60m RESA but if only if the runway is not used by air transport aircraft - this circumstance however can change at any time leaving the existing runway standard no longer commensurate with the revised operational risk. Existing Code 3 and 4 runway RESA standards are grandfathered. ICAO recommendations in the existing note would be clarified to a 'preferred' length of RESA in conjunction with the minimum 		The aerodrome operator cannot control the operating mode of an aircraft (air transport) but can nominate the code of their runway.	
RESA standard.	ļ		
6.2.30 - 6.2.34 Clearway width must now be at least the width of the runway strip.	S	A new standard for clearways is proposed for a future ICAO Annex 14 amendment. Resolves ambiguity were clearway widths are less than the runway strip width.	Sections 6.26-6.30
Other minor editorial changes.			
6.2.35 - 6.2.38	E	Resolves existing ambiguity.	Sections 6.31-6.36
Clarifications made to the standards to stop ways. Some cross references to other sections of the revised MOS would be added.			
6.2.39.2 Existing content to be moved to guidance.	0	Existing paragraph 6.2.39.2 refers to reporting requirements and does not define physical characteristics. Other standards elsewhere in the MOS address how declared distances are to be calculated.	

6.3.1 - 6.3.2	S	Annex 14, Volume I (pending) amendment.	Section 6.36-6.37
Taxiway width and taxiway edge clearance standards would be changed to align with the new proposed Annex 14, Volume I amendments. Existing reference to Code letters would be replaced with links to the outer main gear wheel span.			
6.3.3 Radii for taxi curves are no longer prescriptive but are outcome based. Existing table 6.3-3 would be moved to supporting guidance materials.	S	Industry feedback has indicated that the existing prescriptive values were too limiting for many 'practical' applications of the standard.	Section 6.38
6.3.4 - 6.3.5 Provision included to allow aerodrome operators to exceed maximum transverse and longitudinal slopes when tying into an existing runway or taxiway - provided no adverse hazard is created and the decision is documented.	S	Response to industry feedback based on current issues experienced when either designing new infrastructure or providing overlays on existing infrastructure.	Sections 6.39-6.40
6.3.7 Taxiway bearing strength has been revised to an outcome based standard based on Annex 14, Volume I. The revision would apply to new, upgraded or replaced infrastructure.	S	Annex 14, Volume I alignment. Enhances safety.	Section 6.42
 6.3.8 - 6.3.10 Shoulder requirements would be changed to align with the new proposed Annex 14, Volume I amendment based on outer main gear wheel span and not aircraft code (wingspan). The revised standard is dependent upon aircraft designs with multiple engines which would not otherwise be contained by standard taxiway shoulder width. 	S	Annex 14, Volume I (pending) amendment. Standards for taxiway shoulders need to be revised for the case where the intended aircraft would otherwise have their turbine engines travel outside of the sealed area. The revised standard however is not more constraining than the existing standard.	Sections 6.43-6.45

6.3.11 - 6.3.12	E	Removes ambiguity.	Sections 6.46-6.47
The existing 6.3.11 and 6.3.12 would be rewritten for clarification.			
New standard: Allowable step up and step down along edge of taxiway or taxiway shoulder and within the graded taxiway strip.	S	Industry through their feedback had requested that the existing 25mm tolerance along some aerodrome facilities be expanded to other applications within the manoeuvring area.	Section 6.46
6.3.13	S	Annex 14, Volume I (pending) amendment.	Section 6.48
Taxiway graded strip requirements would be changed to align with the new proposed Annex 14, Volume I amendment. Existing reference to Code letters would be replaced with links to the outer main gear wheel span.			
6.3.16 Existing standard clarified to ensure vehicle access roads may be located within the taxiway strip outside of the graded portion.	E	Industry through feedback requested that the provision of vehicle access roads (normally for Aviation Rescue Fire Fighting use) are clarified as being acceptable within the taxiway strip but provided they are located outside of the graded portion.	Section 6.51
 6.3.17 Taxiway minimum separation distance requirements would be changed to align with the new proposed Annex 14, Volume I amendment. Due to existing Australian differences, the nominal ICAO Annex 14 standards are included as recommendations where they would otherwise be different to the minimum values. New diagram has been provided as guidance. 	S	Annex 14, Volume I (pending) amendment. New diagram clarifies how certain separation distances are to be calculated.	Section 6.52

6.4.1 and 6.4.2.1	0	Educational in nature and not a standard.	
Removed.			
6.4.2 and 6.4.3Existing standards for various holding positions, including holding bays and runway hold positions would be expanded. The revised standards ensure that not just the inner transitional surface is protected but rather the overall obstacle free zone and the approach and take off OLS are also kept clear.Existing runway hold positions are grandfathered.	S	Annex 14, Volume I alignment. The change ensures that aircraft and vehicles located on runway holding positions are clear of the OLS, during all-weather modes, which enhances safety.	Sections 6.53-6.54
6.4.4 Minimum distance from runway holding position, intermediate holding position or road-holding position, to the associated runway centreline, would be changed to align with Annex 14, Volume I.	S	Annex 14, Volume I alignment. Some relief is provided for Code 3 and 4 hold points for Precision Category II and III approaches. Code F holding position locations are unchanged for Code F runways. The need to move the holding positions further out to avoid interference with the ILS critical area is now clarified as a 'must' as it provides a safety enhancement.	Section 6.55
6.5.2 Standards for taxilane minimum separation distance to parallel taxilanes and objects would be relocated to the taxiway minimum separation distance table.	E	Annex 14, Volume I alignment. These distances are more appropriately expressed within the standards for taxiway minimum separation distances as taxilanes are a type of taxiway regardless of their location within an apron.	Table 6.52 (1)

 6.5.3 Slopes on aprons would be revised to clarify that taxilanes, being a subset of taxiways, must comply with taxiway longitudinal and transverse gradients. All other apron areas are subject to apron slopes except within parking position envelopes which are subject to a parking position slope. Natural surface aprons are provided additional relief with a revised slope of up to 2%. Existing aprons and taxilanes are grandfathered. 	S	Annex, Volume I alignment. Clarifies ambiguities with applying the existing standard as identified through industry feedback. Relief for natural aprons has been proposed due to the less sensitive nature of general aviation aircraft which typically use such facilities.	Section 6.59
6.5.4 Apron bearing strength has been revised to an outcome based standard based on Annex 14, Volume I. The revision would apply to new, upgraded or replaced infrastructure.	S	Annex 14, Volume I alignment. Enhances safety.	Section 6.60
 6.5.5 Standards for minimum separation between apron service roads and aircraft parking positions are clarified as applying horizontally. Existing apron service roads are grandfathered. 	E	Based on industry feedback, there was inconsistency over the application of the existing standard either vertically, diagonally or horizontally.	Section 6.61
6.6 Section is clarified as applying to jet blast, propeller wash or rotor wash. The revised outcome based standard clarifies the intent.	E	Further clarification was required for these standards to ensure they are applied to movement area design which is within the aerodrome operator's control. The operation of aircraft power or thrust systems is an aircraft operator responsibility however the movement area design must ensure that public, personnel, buildings and equipment are protected from aircraft operating in normal conditions.	Sections 6.62 and 6.63

6.7.1 Reference to aircraft movements has been removed.	0	Approval for the utilisation of the movement area by aircraft is not within the scope of Part 139. The aerodrome operator's function is to provide the facility to the required standard.	
 6.7.5.1 Reference to glider strip standards has been clarified as being in the MOS and not in a Civil Aviation Advisory Publication (CAAP). Natural surface standards for runways and runway strips would be applied to glider strips to ensure a safe surface is provided. Glider runway strips are now linked to the overall OLS for the runway 	S	The recommended characteristics for an Aeroplane Landing Area are currently published in a CAAP which is provided for guidance only. A MOS is not permitted to make guidance materials (such as a CAAP) legally enforceable. Linking glider runway strips to natural surface standards and the OLS provides a safety enhancement.	Section 6.67
 7.1.1 and 7.1.2 Obstacle and related definitions (including the Obstacle Restricted Area) would be moved to the general definitions section. The remainder of the standards would be consolidated. Requirements for the Part 173 interface with Part 139 would be clarified with supporting notes. 	E	Drafting policy requires definitions to be consolidated where ever possible. Resolves existing ambiguities with the interface between Part 139 and Part 173. This has been raised through industry feedback.	Sections 3.01, 7.01 and 7.02
 7.1.3 including Table 7.1-1 Approach runway OLS requirements would be changed to align with the new proposed Annex 14, Volume I amendment based on the revised runway strip widths and the revised inner edge. The Balked Landing surface (part of the Obstacle Limitation surface) has also been revised as a result. Due to existing Australian differences, the nominal ICAO Annex 14 standards are included as recommendations. 	S	Annex 14, Volume I (pending) amendment.	Sections 7.15 and 7.17

7.1.4	E	Resolves ambiguity as referenced in industry feedback.	Section 7.18
Minor editorial changes.			
7.1.5 Removed	0	The Aerodrome Operator has no control of obstacles outside of their OLS. This is addressed generally under proposed regulation 139 145 of CASE	
7.1.6	E	Much of the existing content describes options and processes.	Section 7.19
be retained.		Directions are now addressed through Part 11 or CASR.	
The remaining material would be either moved to guidance or would be included in CASA operational procedures.			
7.1.7	S	The current standard only references non precision approaches and does not reflect precision approaches	Section 7.20
The monitoring of instrument runways has been clarified to cover all PANS-OPS surfaces as determined by the terminal instrument flight procedure designer based on their provided information.		and instrument departures which also have a safety requirement under CASR Part 173 to be monitored.	
7.1.8	0	Procedural in nature and not a standard. These	
Removed.		Sections 7.19 and 7.20.	
7.1.9	0	Curved OLS for take-offs are not used in Australia and no design criteria are available.	
Removed.		5	

 7.2.1 and 7.2.2 Content clarified to address the existing CASR 175 interface with Type A and B charts. Charts must be provided in an electronic form. Links would be provided to ensure Type chart accuracy is verified as part of annual technical inspection. 	S	Consequential amendments were required after the making of CASR Part 175.	Sections 7.21 and 7.22
7.2.3 Removed.	0	Type C charts are no longer published in Australia and would be replaced by Electronic Terrain Obstacle Data under Part 175.	
7.2.4 Content clarified to address the existing CASR 175 interface with Precision Approach Terrain Charts - ICAO	S	Consequential amendments were required after the making of CASR Part 175.	Section 7.23
New standard: Aerodrome Terrain and Obstacle Charts - ICAO Contains the latest aeronautical chart information available from ICAO Annex 4.	S	Annex 4 alignment. Can replace Type A (and Type B) information if provided which may provide additional options for aerodrome operators.	Section 7.24
7.3.1 - 7.3.2 The existing descriptions of the various components of the OLS would be clarified as clear standards.	E	The existing MOS provided descriptions of the OLS components however current drafting practice requires that clear standards be provided.	Sections 7.04 - 7.14
New standard: for an OLS: If an outer horizontal surface is present and does not terminate directly into the commencement of the outer horizontal surface, the conical surface must then continue outwards on the same plane, perpendicular to the periphery of the inner horizontal surface, until it reaches the commencement of the outer horizontal surface.	S	Clarifies how the OLS is to be drawn in cases where the outer horizontal and conical surfaces do not align at a common height reference. The proposal for this amended standard has been consulted with experienced designers and surveyors of the OLS.	Section 7.06

7.4.1Aerodrome operators are now provided the option to adopt shielding principles during the development of their Type A charts.Other existing requirements would be further clarified.	S	Normally CASA is the only party authorised to determine shielding however the aerodrome operator during the preparation of a Type A chart would have a detailed technical understanding of the area under survey. Shielding principles can then be applied in the development of their Type charts. Other amendments resolve ambiguities with the existing standard.	Section 7.25
7.4.2 Removed. Likely to feature in revised guidance materials.	0	This largely describes a CASA internal procedure and is educational in nature and not a standard.	
8.1.1 Approval mechanism has been relocated.	E	To be included in a generic approval provision covering the whole Part 139 MOS.	Section 2.05.
New standard: Maintenance requirements for visual aids (excluding lights) would be clarified.	S	Visual aids which become no longer visible and also those which are not maintained in a clearly visible condition pose a safety hazard for aircraft operations.	Section 8.01
8.1.3 Additional colour options provided for greens and reds. Preferred values for colour however are still specified.	S	Industry has requested more availability with colour choice.	Section 8.03
8.1.4 Additional colours and options provided for marking backgrounds. The required size for the backgrounds of markings has been clarified.	S	Industry has requested more availability with colour choice for backgrounds. The 'adequate' size for the marking of backgrounds required clarification based on industry feedback.	Section 8.04
New Standard: Dimensions and tolerance of markings and markers.	S	Industry through feedback had requested more tolerance over the application of markings and also to address the slight variations which exist between marker sizes provided from different suppliers.	Section 8.05

8.2.1 The specification for markers (normally cones) used in locations other than on runways is now outcome based. Dimensions further clarified based on a height to width and minimum clearance to propellers and engine pods.	S	Industry had requested more tolerance over the size of markers due to variations between manufacturers and applications.	Sections 8.06-8.07
8.2.1.4 Works limit marker standards are now outcome based. Traditional 'witches hats' are still permitted however other marker options are now available.	S	Industry through feedback had requested more availability with marker choice.	Section 8.08
8.2.2.2 The use of flush markers is more flexible provided that they are adequately maintained in a visible condition and vehicle control aspects are managed. Flush and gable cones/markers however are not to be mixed.	S	Industry through feedback had requested more availability with marker use.	Section 8.11
8.2.2.3 The legacy standard allowing CASA agreement for the use of 44 gallon drums as runway strip markers has been removed.	0	These marker types are not frangible, do not align with international practice and could pose a safety hazard to aircraft.	
8.2.4 The correct location for taxiway edge markers has been clarified.	E	The correct location for these markers is along the taxiway edge, and not the graded edge, in accordance with Annex 14, Volume I. For narrower taxiways, markers however need to be sized so they are clear (below) of propellers or engine pods of the intended aircraft.	Section 8.13
8.2.4 The location of apron edge markers has been clarified to also specify the maximum permissible spacing.	S	The current standard contained ambiguity.	Section 8.14

8.3.1	E	The current standard contained ambiguity.	Section 8.15
The 'most important runway' has been clarified as with the highest nominated code or movement rate.			
8.3.2 Heading changed to 'Pre-threshold area markings'	E	Clarifies the context prior to the threshold which is more relevant than referring to the 'runway end'.	Section 8.16
8.3.3 New standard applying a 0.9m centreline width for runways nominated for instrument departures below 550m runway visual range.	S	Some runways do not feature CAT II and CAT III precision approaches yet facilitate take-off operations below 550 RVR. Additional centreline width assists with directional control during the take-off sequence and reduces the risk of a runway centreline deviation.	Section 8.19
8.3.4.3 The use of runway letters for parallel runways has been further clarified to include additional multiple runway combinations as referenced in Annex 14, Volume I.	S	These details would be included to support any future aerodrome developments beyond 3 parallel runways.	Table 8.18 (5)
Figure 8.3-4 The internal dimensions for the numbers '6' and '9' would be corrected.	E	Correction of an error in the existing MOS against Annex 14, Volume I.	Figure 8.18 (6) -2
8.3.5 Runway end marking and such any such markings co-located with a runway threshold marking has been clarified.	E	Addresses existing ambiguities regarding the categorisation of these marking for runways where they are co-located.	Section 8.20
8.3.6.6 Removed.	0	Standards for runway turn pad markings are now provided.	Section 8.33

8.3.7 Legacy dates for the transition of aiming point markings have now been removed. All other standards have not changed in intent.	E	All the published transition dates are now in the past.	Section 8.22
 8.3.7A Revised standard for touchdown zone markings allows some marking pairs to be omitted were they would otherwise overlap or be marked too close to similar markings from the reciprocal runway end. Legacy dates for transition have now been removed. 	S	Based on FAA best practice for certain critical runway lengths. All the published transition dates are now in the past.	Sections 8.23-8.24
8.3.8 The existing standards for runway threshold markings would be clarified.	E	The current standard contained ambiguity based on industry feedback.	Section 8.17
New standard: Permanently displaced threshold markings.	S	The existing MOS only contained standards for temporarily displaced threshold markings and not permanent markings.	Section 8.26

8.3.9	S	Aligns with Annex 14 Volume I recommendations.	Sections 8.27-8.31
Runway Threshold Identification Lights (RTIL) now mandated for the thresholds of aerodromes with scheduled international operations which are temporarily displaced. Aerodrome operators are now provided the option to omit temporarily displaced threshold markers where works are only conducted at night. Movement Area Guidance signs for intersection departures must be obscured during any during periods where declared distances are incorrect (i.e. shortened runway end). The use of Vee bar markings is now prohibited for use at aerodromes with scheduled international air transport operations.		These standards was inferred in the existing MOS but were ambiguous. Vee-bar markers are not an internationally recognised marking. RTIL are the international recognised visual aid.	
New standard: Runway turn pad markings.	S	The current MOS did not contain a visual standard for runway turn pad markings. The new proposal aligns with Annex 14 Volume I specification and colour (note: edge lines must be yellow and not white).	Section 8.33
New standard: Runway starter extension markings and the continued use of runway side stripes.	S	The current MOS did not contain a visual standard for runway starter extension markings which are in use at several aerodromes. The new proposal aligns with Annex 14 Volume I general specifications.	Section 8.34

8.4.2 Taxiway guideline markers are now able to be offset from the middle of the sealed taxiway centreline or pavement where an object in the nominal taxiway strip needs to be avoided.	S	The current MOS did not contain a visual standard for 'offset' taxi guideline markings which are in use at several aerodromes. Taxiway strip clearances however must be maintained for any offset taxi guideline markings provided.	Sections 8.35-8.37
The use of taxi guidelines for crossing runways is now clarified. The use of taxi guidelines for runway end entries is now clarified.		The current MOS did not contain a clear visual standard for taxi guideline markings either crossing a runway or entering a runway at the runway end. All these marking types are commonly used at existing aerodromes and require clarification.	
New (optional) standard: Enhanced taxi guidelines.	S	The marking types are available in Annex 14 Volume I and can be used for aerodromes as an additional visual aid to assist mitigation against runway incursions.	Section 8.38
 8.4.3 Runway holding position markings New size and specification from the amended Annex 14 Volume I specification. Subject to an extended transition period to be completed by November 2026 in line with ICAO global mandate. 	S	Australia proposes to adopt the larger marking in accordance with the ICAO global mandate to assist mitigation against runway incursions.	Section 8.39
New (optional) standard: Mandatory instruction markings.	S	Available in Annex 14 Volume I and can be used for aerodromes as an additional visual aid to assist with mitigation against runway incursions or to enhance movement area guidance.	Section 8.40
New (optional) standard: Instruction markings.	S	Available in Annex 14 Volume I and can be used for aerodromes as an additional visual aid to enhance movement area guidance.	Section 8.41
8.4.5 Location of taxiway edge markings has been clarified.	E	The current standard contained ambiguity based on industry feedback.	Section 8.43

8.4.6 Location of holding bay markings clarified.	E	The current standard contained ambiguity based on industry feedback.	Section 8.44
8.4.7 The use of the existing taxiway pavement strength limit marking has been expanded to cover additional reasons for advising aircraft of a taxiway limitation.	S	Industry feedback requested that additional flexibility is provided for the use of this existing marking type.	Section 8.45
 8.5.1 Clarified the application of the existing standard to traditional aircraft with a tricycle undercarriage. Clearance requirements for providing taxi guidelines on aprons further clarified. The requirement to always provide primary parking position markings where secondary parking positions are used has also been clarified. 	S	Two wheeled (tail dragger) aircraft cannot readily follow taxi guidelines due to limitations with downward visibility. This proposal clarifies existing ambiguities in the provision of taxi guidelines on aprons and the use of primary and secondary parking positions.	Section 8.46
8.5.2 The required aircraft design principles to be used when designing and marking taxi guidelines on an apron has been further clarified.	S	Clarifies the existing ambiguity in the (aircraft) design principles used for apron markings and their use by flight crew.	Section 8.47
8.5.3 The location of apron edge markings has been clarified.	E	The current standard contained ambiguity based on industry feedback.	Section 8.48
8.5.4 The use of the colour white has been removed from parking clearance lines.	0	This colour has been removed to ensure there is no confusion with the use of a red equipment storage marking with a white background. White markings on an apron are intended for use by ground vehicles and not by aircraft.	Section 8.50

8.5.5 - 8.5.6 The existing use of the parking weight limit marking has been expanded to cover additional reasons for advising pilots of an apron limitation.	S	Industry feedback had requested additional flexibility in the use of this existing marking type.	Section 8.51
8.5.7 The use of the existing leased area line marking has been broadened for use in other contexts.	S	Industry feedback requested additional flexibility in the use of this existing marking type.	Section 8.77
 8.5.10 Apron service road markings would be revised to allow an apron limit line marking to be incorporated (in conjunction) with the apron service road marking. The use of the double white edge line, to ensure the apron service vehicles remain outside of a taxiway or taxilane, has been further clarified. The markings used for apron service roads where they cross Taxiways or Taxilanes are now outcome based in terms of colour. 	S	The current standard was ambiguous in application. Some aerodrome operators were using non-standard markings to delineate the manoeuvring area boundary to vehicles. The revised standard now provides a compliance option.	Section 8.54
 8.5.11 The application of the existing standard to traditional aircraft with a tricycle undercarriage has been clarified. The need to achieve clearance requirements for taxi guidelines provided on parking positions has been clarified. Amendments would be made to further clarify the requirement to always provide primary parking position markings where secondary parking positions are used. 	S	Two wheeled (tail dragger) aircraft cannot readily follow taxi guidelines due to limitations with downward visibility. The proposal clarifies existing ambiguities in the use of primary and secondary parking positions.	Section 8.55

8.5.13 The existing aircraft type and parking weight limit markings would be expanded to cover additional reasons for advising pilots of a parking position limitation.	S	Industry feedback had requested additional flexibility be provided in the use of this existing marking type.	Section 8.60
8.5.14	E	The existing MOS did not contain a supporting figure.	Section 8.61
The pilot turn line marking has been visually clarified with a supporting figure.			
 8.5.15 - 8.5.16 The location of marshallers stop lines with relation to the lead in line has been made more flexible. These markings can now be used on a secondary parking position for Code C sized aircraft and above. The requirement that aircraft type designators can only use the ICAO code system has been further clarified. 	S	Industry feedback requested that additional flexibility is provided with the use of this existing marking type. Some aerodrome operators were either using IATA codes or other non-standard terms such as 'all aircraft.' Consistency is essential to ensure parking positions are correctly identified. As apron personnel can be itinerant in work locations, they also benefit from a standardised reference system which enhances safety.	Sections 8.49 and 8.63
8.5.18 Alignment lines may now be truncated in cases where it is not possible to provide the full length due to a physical obstruction.	S	Industry feedback requested that additional flexibility is provided with the use of this existing marking type where it is not possible to provide the full length.	Section 8.65
8.5.19 Secondary parking positions must only be marked in yellow. Availability to use the colour white has been removed.	S	The colour white on taxiways and aprons is normally reserved for use by vehicles and equipment. Confusion can result if this colour is used for aircraft guidance on a taxiway or an apron.	Section 8.66

8.5.20 Keyhole marking use is now restricted to Code A and B aircraft sizes (up to 24 m wingspan).	S	Industry feedback indicated that this marking is not appropriate for use with large sized aircraft as it cannot be readily monitored by marshallers who have to stand at a location distant from the stop position in order to be visible from the aircraft cockpit. This marking type is not consistent with ICAO Annex 14.	Section 8.67
8.5.21 Triangle stop position marking types would be removed.	0	Industry feedback indicated this marking is widely not used. This marking type is not consistent with ICAO Annex 14.	
8.5.24 Aircraft parking position can now be omitted where a parking position sign is provided or the parking position is serviced by a visual docking guidance system.	S	Industry feedback requested that additional flexibility is provided with the use of this existing marking.	Section 8.58.
8.5.25 (including figures) The correct application of the standard has been clarified to address other marking sizes than the current grid spacing which is only based on 0.2m	E	The use of the existing figure was too limiting.	Section 8.69
8.5.26 - 8.5.31 The use of push back and tow markings would be clarified as now being optional for aerodrome operator use. These markings must meet the standards if provided.	E	Industry request for clarification and greater flexibility in the use of these markings.	Sections 8.70-8.75
8.5.32 The option and use of passenger path markings has been clarified.	E	Response to industry feedback to resolve ambiguity.	Section 8.76

New standard: Hazardous area markings	S	Response to industry feedback which requested a new marking to define hazardous areas on the apron (i.e. aerobridge drive zones, pit covers, etc.). The proposal is based on an Airports Council International marking design which is already used at many Australian aerodromes.	Section 8.78
8.5.33 Removed.	0	Existing figure contained numerous technical errors. May be relocated into future guidance materials.	
8.6.3 MAG signs are now able to be located on the right hand side of a taxiway it is not possible to locate it on the left hand side due to an obstruction.	S	Industry feedback requested that additional flexibility is provided with the location of these signs.	Section 8.81
 8.6.4 MAG signs are now able to be conditionally located at a further distance from the taxiway than otherwise permitted in the standard - if it is not possible to locate it preferred location due to a jet blast or prop wash. The correct size for combined information and mandatory MAG signs has now been clarified. 	S	Industry feedback requested that additional flexibility is provided with the location of these signs. Existing standard contained ambiguity with regard to the correct size of combined MAG message 'types' within a single overall sign.	Section 8.82
Figure 8.6-4 Removed.	0	Was a direct duplication of existing Figure 8.6-3.	
8.6.5 Frangibility requirements would be updated to align with the specifications in the ICAO Aerodrome Design Manual - Part 6.	S	The existing standard was not aligned with international best practice. CASA is aware of reported operational incidents where some signs have yielded too early when subjected to either wind or jet blast effects.	Section 8.112

8.6.6 The existing trigger for MAG sign illumination has been changed to an operational nomination rather than use by a particular aircraft type.		The existing' standard is based on aircraft use which is outside the aerodrome operators control Based on risk, illumination is now deemed to be required when the aerodrome supports either scheduled international operations, visual range conditions less than 800m or RVR conditions less than 800m. This change enhances alignment with Annex 14 Volume I.	Section 8.85
8.6.8 Runway designation MAG signs may be located on one side of a taxiway only it is not possible to locate it on the other side due to an obstacle or obstruction.	S	Industry feedback requested that additional flexibility is provided with the location of these signs.	Section 8.87
8.6.9 Category I, II or III Runway Designation MAG signs are now able to be located only one side of a taxiway it is not possible to locate it on the left hand side due to an obstacle or obstruction.	S	Industry feedback requested that additional flexibility is provided with the location of these signs.	Section 8.88
8.6.11 Aircraft NO ENTRY MAG signs are now able to be located only one side of a taxiway it is not possible to locate it on the left hand side due to an obstacle or obstruction.	S	Industry feedback requested that additional flexibility is provided with the location of these signs.	Section 8.90
8.7.1 Additional options are conditionally provided for the location of the wind direction indicator where the preferred location is otherwise obstructed.	S	Industry feedback requested that additional flexibility is provided with the location of wind direction indicators.	Section 8.101

8.7.2 Additional colour options are provided for secondary wind direction indicators. Conspicuously requirements would be further clarified.	S	Industry feedback requested that additional flexibility is provided for the colour of wind direction indicator sleeves. ICAO Annex 14, Volume I allow the colour orange to be used.	Section 8.102
8.8 The provision of ground signals is now optional. The double cross marking for gliders has been removed.		The mandatory carriage of radios for aerodromes with a CTAF, and the authorisation for straight in approaches, both make these signal types redundant for many aircraft operations at aerodromes. Industry feedback requested that additional flexibility is provided with the provision of these signals. Glider operations are subject to NOTAM and pilots either departing from the ground of conducting a straight in approach are unlikely to see the glider operations signal.	Sections 8.103 and 8.104
8.9Standards would be revised following the completed consultation for NPRM 1411AS.The updated standards would define the use of the 6m, 9m and 36m unserviceability cross types for different runway widths.	S	These changes have already been consulted and would be subject a parallel transition period to the proposed overall MOS changes.	Sections 8.105-8.106
8.10.1 - 8.10.3 Amendments would be made to clarify what is an object, an obstacle and a hazardous obstacle with relation to obstacle markings.	E	Resolves ambiguity on the process used to identify objects and then the resultant definition of some of these objects as either obstacles or hazardous obstacles (requiring marking) following an assessment process (CASA determination).	Sections 8.108 - 8.110

8.10.4.3 Removed.	0	The use of flags on vehicles is deemed to be too hazardous to preserve in the future MOS. Vehicle warning lights provide a superior outcome and are deemed safer for use.	
New standard: Frangibility of markers Marker Frangibility standards would be provided based on ICAO Aerodrome Design Manual Part 6.	S	Industry feedback that frangibility requirements for markers were not clearly specified.	Sections 8.111-8.112
8.11 Section has been replaced in order to reflect standards and recommended practices for visual aids in Annex 14, Volume II.	S	Existing standards were not based on visual aid standards and recommended practices contained in Annex 14 Volume II.	Sections 8.113-8.124
9.1.1 Removed.	0	Content has been removed as it documents a legacy transition period for the former standards which has been completed.	
9.1.2 Rewritten. Reference to solid state (LED) lighting systems and the required colour standards have now been included. What constitutes as 'mixing' within a lighting system has been clarified.	S	ICAO Annex 14, Volume I alignment. Some exiting material was educational in nature and not a standard. Existing standards were contained ambiguity.	Section 9.10
9.1.3 Rewritten to apply to those monitoring and referral activities within the aerodrome operators control. The context has been aligned to general monitoring within their aerodrome boundary.	S	Aerodrome operators are currently challenged when monitoring for hazardous light sources outside of their boundary.	Section 9.141

 9.1.4 Approach lighting requirements would be clarified. CAT II and CAT III runways and also CAT I runways intended for a visibility less than 1500m are required to have an approach lighting system provided. In other cases, aerodrome operators may receive CASA agreement to either truncate or omit an approach lighting system where it is not physically possible to provide the normal length. 	S	Provides a more flexible standard in line with common practice overseas for truncated systems. Aerodrome operators must be aware however that truncated or omitted systems would likely result in operational penalties, therefore the approach procedures may not be usable by aircraft in adverse environmental conditions.	Section 9.01
 9.1.5 Outcome based standards provide for varied primary power supply sources. The chosen supply source must ensure full and continuous operation. Some narrative is intended to be moved to guidance. 	S	Industry request for more flexibility given the emergence of new technologies for power supply provision. Some materials were educational in nature and not a standard.	Section 9.03
9.1.6 Outcome based standards provide for more flexible circuit designs and future technologies.	S	Based on FAA and NZ CAA standards and sets the outcome to be achieved (design against critical failure).	Section 9.02
9.1.7 Outcome based standard provided for secondary power supply. The chosen secondary supply source must ensure full and continuous operation in the event the primary system fails.	S	Industry request for more flexibility given the emergence of new technologies for power supply provision.	Section 9.04
9.1.9 Outcome based standard provided for standby power supply activation (if provided).	S	Industry request for more flexibility with activation by responsible persons.	Section 9.06

9.1.10 Liquid burning flares would be removed from the standard.	S	Removed to due to the potential hazard involved in their use in direct proximity to operating runways. Existing use is grandfathered however aerodrome operators need to consider their own risk in using these types of visual aids.	Section 9.07
New standard: Portable lights on taxiways and apron edges.	S	 Clarifies what is common industry practice with the use of portable lights during either: an outage of the primary installed system; or as a contingency during aerodrome works. 	Section 9.08
9.1.11 Clarifies the requirement to ensure frangibility.	S	Annex 14 alignment and resolves ambiguity with the existing frangibility standard.	Section 9.09
9.1.12Elevated and inset light heights clarified.Maximum height changed to permit Configuration A runway guard lights up to 450mm above ground level.	S	Resolves ambiguity with the existing frangibility standard. Industry advice has indicated that Configuration A runway guard lights are normally higher than 360mm above ground level.	Section 9.11
9.1.13 Elements from this standard would be addressed in the standardisation of aerodrome lighting and the colours of aeronautical ground lights. Solid state lighting (LED) use has been further clarified.	0	Revised drafting format and addresses ambiguities in the existing standard.	Sections 9.10 and 9.13
9.1.14Existing standard has been revised to include more options for lighting control and the design and number of selectable stages.Some educational material is intended to be moved to guidance.	S	Industry through feedback had requested a more flexible approach for light intensity and control. Changes still align with Annex 14 Volume I intent.	Section 9.12

 9.1.15 Significant changes are proposed to commissioning standards. Compliance statements would be added as an option where CASA can now form bilateral agreement with other ICAO states. Testing options through NATA now include ILAC. 	S	Industry through feedback had requested a more flexible approach for light commissioning.	Section 9.17
9.2		Annex 14 Volume I alignment.	Sections 9.13-9.16
New CIE colour standards for Solid State (LED) lights would be introduced from Annex 14 Volume I.		Colour shift requirements are now clearly specified to incandescent lighting systems to remove ambiguity.	
Colour shift applies only to incandescent lighting systems. Existing colour green 'boundaries' would be maintained as per current CASA policy to support colour deficient pilots.		Australia permits pilots with colour deficiency to operate aircraft (on condition) which has historically required the colour green boundary to be limited as a result. This same approach is also taken by Japan and some other ICAO states.	
9.3.1 Light intensity settings for PAL system would be revised to include outcome based requirements.	S	Industry through feedback had requested additional flexibility.	Section 9.19
9.3.3 Reference to 'crystal controlled 'receivers has been removed.	S	Replaced with an outcome based standard to support modern and future receiver designs.	Section 9.21
9.3.6 Manual access to switching systems has been revised to an outcome based requirement rather than prescriptive.		Industry through feedback had requested additional flexibility.	Section 9.24
9.3.8 Acknowledgement responses through a PAL system would be clarified to promote message consistency.	E	Both CASA and industry have reported variances with existing PAL acknowledgement messages. A standard message structures resolve ambiguity and enhances safety.	Section 9.26

 9.4.1 The existing requirement to monitor obstacle light objects outside the OLS, and at heights greater than 110m AGL, has been removed from MOS with regard to aerodrome operator responsibility. The remainder of the subsection has been clarified with regard to objects and hazardous obstacles - the latter which normally requires obstacle lights. 	S	Such obstacles outside of their OLS are not within the responsibility of the aerodrome operator. The revised regulation 139.145 of CASR would instead apply generally	Section 9.27
9.4.2 The revised standard allows the use of medium intensity obstacle lights in environmentally sensitive environments (i.e. high density residential locations) in lieu of high intensity obstacle lights.	S	Concerns have been raised with the use of high intensity obstacle lights in high density urban environments.	Section 9.30
9.4.8 References to 'day', 'dusk/dawn' and 'night' would be removed from the high intensity obstacle light requirements.	E	Industry feedback has advised that the background luminance is the critical factor. The time of day that each luminance occurs is considered superfluous.	Section 9.34
 9.4.10 Standards for obstacle light observations would be revised to align the observation schedule to be commensurate with aerodrome risk: International aerodromes with scheduled air transport movements: observations required every 24 hours aerodromes with scheduled air transport movements: observations required every 48 hours other aerodromes: observations required at least weekly Approvals for alternative schedules are now possible subject to CASA accepting a suitable safety case. 	S	Industry have reported that the checking obstacle lights every 24 hours at aerodromes without air transport operations was an operational impost when the aerodrome itself was only inspected twice per week. The proposals allow additional flexibility where obstacle lights are located at a distance from the aerodrome.	Section 9.36

9.5 The provision of aerodrome beacons is now optional unless CASA directs for a beacon to be provided.	S	Beacon use is becoming less critical with the advent of current generation navigation systems.	Section 9.37
 9.6.1 Visibility requirements for illuminated wind indicators would be clarified to ensure the sleeve is illuminated for all directions of azimuth simultaneously. The difference between primary and other wind direction indicators has been clarified with regard to lighting and PAL functionality. 	S	Addresses ambiguities with the existing standards reported through surveillance and industry feedback. Field experience has shown that illuminating the sleeve from a single movable point with 4 lamp units does not provide sufficient illumination when viewed from other directions of azimuth.	Section 9.38
9.6.1.3C Removed.	0	Transition details relate to legacy systems which were installed prior to 2011. In future, such systems would be addressed under the generic grandfathering provisions.	
9.7.1 Standards for a simple approach lighting system has been included based on Annex 14, Volume I.	S	Aerodromes may obtain an operational benefit by electing to provide such a system. The new MOS provides the correct specification for such a case.	Sections 9.39-9.40
 9.7.2 Standards for a precision approach CAT I lighting system would be revised based on Annex 14, Volume I and also international practice. Aerodrome operators may receive agreement from CASA to truncate or omit an approach lighting system in cases where it is not physically possible to provide the full length. The existing standards including light spacings would be clarified. 	S	Provides a more flexible standard in line with common practice overseas for truncated systems. Aerodrome operators must be aware however that truncated or omitted systems would likely result in an operational penalty or may not be usable by aircraft in adverse environmental conditions. Existing standards contained ambiguity regarding the location of cross bars and centreline spacings which has been addressed.	Section 9.41

 9.7.3 Standards for a precision approach CAT II lighting system would be revised based on Annex 14, Volume I and international practice. Aerodrome operators may receive agreement from CASA to truncate or omit an approach lighting system in cases where it is not physically possible to provide the full length. The existing standards including light spacings would be clarified. 		Provides a more flexible standard in line with common practice overseas for truncated systems. Aerodrome operators must be aware however that truncated of omitted systems would likely result in an operational penalty or may not be usable by aircraft in adverse environmental conditions. Existing standards contained ambiguity regarding the location of cross bars and centreline spacings which has been addressed.	Section 9.42
 9.9.1 For all aerodromes, except international aerodromes with scheduled air transport operations, replacing a T-VASIS no longer requires a double sided PAPI to be provided. More flexibility is provided for AT-VASIS and PAPI locations where is not possible to install the unit on the preferred side due to a physical obstruction. 	S	Annex 14, Volume I alignment. Industry feedback had requested additional flexibility.	Section 9.44
9.9.4 The term 'special' has been reverted to 'minimum' with regard to describing PAPI wheel clearance over threshold including the existing MOS table 9.9-4.	E	Annex 14 alignment. 'Special' is not a common use term in Annex 14, Volume I.	Section 9.50
9.10.1 Types of runway systems would be clarified as being either for a precision approach runway or a non-precision approach/non-instrument runway.	S	Aligns with Annex 14, Volume I. Delinks low and medium intensity systems from high intensity systems which are intended for precision approach runways.	Various sections within the proposed Part 9

 9.10.2 - 9.10.5 Circling guidance from omnidirectional runway edge lights are no longer required if a runway does not facilitate visual circuits or circling. Grandfather requirements would be moved to the generic section which addresses such matters. Precision runway edge light patterns would be clarified for aerodromes facilitating take-off operations in visibility less than 350m RVR. 	S	Aligns with Annex 14. Allows high capacity aerodromes, where traffic management does not facilitate circuits or circling, to not unnecessarily duplicate their high intensity lighting system to provide omnidirectional capability. Grandfather requirements are now general in their application within the revised MOS.	Sections 9.51 and 2.03
9.06 Minimum angle for applying intensity settings changed from 0 degrees to one degree.	S	Industry feedback stated that lights may fail laboratory testing even through the lights are typically never viewed at a 0 degree relative angle from the runway level.	Section 9.52
9.10.11 and 9.10.13Runway thresholds for non-precision/non instrument runways (low and minimum intensity systems) no longer require a pair of green omnidirectional threshold lights at each end unless the aerodrome operator chooses.Grandfather requirements in the note would be removed.	S	Industry feedback requested review and Annex 14 alignment. Changes preserves the legacy standard as an option but makes it non-binding. Grandfather requirements are now general in their application within the revised MOS.	Section 9.55 and 2.03
9.10.17 Revised standard: Reference to starter extensions would be added to the existing standards for runway end lights.	S	The current MOS did not contain a visual standard for runway starter extension markings which are in use at several aerodromes. The proposal aligns with Annex 14 Volume I general specifications. The specification for the 'passing gap' between the runway end lights has been based on the maximum OMGWS for each nominated ARC code letter with an additional safety factor of 50% applied to the spacing.	Section 9.64

9.10.21	E	Alignment with Annex 14 Volume I terminology	Section 9.67
Runway turning areas would be renamed as runway turn pads.			
9.10.23	E	The term 'occult' is not in general use and in any case is	Section 9.69
Reference to 'occult' removed.		covered by the term hashing	
Existing note intended to be moved to guidance.			
New standard: Simple touch down zone lights.	S	Aerodromes may obtain operational and safety benefits	Section 9.71
Standards for simple touch zone lights would be included based on Annex 14, Volume I.		ovides the correct specification in such a case.	
9.11.1 (including figures)	S li	Industry feedback stated that lights may fail laboratory testing even through the lights are never viewed at a 0 degree angle.	Section 9.75
Minimum angle for applying intensity settings changed from 0 degrees to one degree as stated in the notes.			
9.12	S	Figures required an update to support many of the revised outcome based lighting standards.	Section 9.76
Figures updated.			
9.13.1 - 9.13.2	S	Annex 14 Volume I alignment.	Sections 9.77-9.78
Reference to simple aerodrome layouts removed.		The 'Sea of blue' effect is an important consideration in lighting design as it may present a hazard to aircraft operations.	
RVR conditions less than 1200m would be clarified as a recommendation for taxiway centreline lighting.			
Reference to the 'sea of blue' effect has been included.			

9.13.5 A flexible provision has been included allowing alternating taxiway centreline and edge lights to be used on a temporary basis during periods of words.	S	Addresses a common practice used at many existing aerodromes.	Section 9.81
9.13.6 The control of lights with an intensity of more than 20 cd has been merged into the general section for light intensity and control.	E	Addresses ambiguity. Change still aligns with Annex 14 Volume I intent.	Section 9.12
9.13.8The standards for the spacing of taxiway centreline lights would be amended to reflect Annex 14, Volume I.What constitutes 'short straight taxiway' has been clarified.	S	Annex 14 Volume I alignment. Industry feedback requested greater clarity and flexibility within the existing standard.	Section 9.84
New standard: Taxiway centreline light patterns for runway entries (located both at the end and midpoint) as well as for runway crossings. Australian standard for straight line entries has been preserved but for runway ends only.	S	Industry feedback requested greater clarity and flexibility within the existing standard. The current standard is ambiguous and has been applied in locations outside of the runway ends which does not align with the intent of Annex 14, Volume I.	Section 9.85
9.13.14 Existing standards for taxiway centreline light spacings are now more flexible and outcome based. Variations are now permissible if the underlying reason is documented in the aerodrome manual.	S	Industry feedback had requested greater clarity and flexibility within the existing standard.	Section 9.91
9.13.29 Taxiway centreline marker viewing sizes has been reduced to 15 square centimetres (down from 20 square centimetres).	S	This change allows standard 'cats-eye' reflective pavement markers to be used as an acceptable compliance option.	Section 9.96

9.15 Figures would be updated.	S	Figures required an update to support many of the revised outcome based lighting standards.	Section 9.110
9.16.1 Omitted.	0	Educational in nature and not a standard.	
9.16.3 For cases where achieving the apron luminance standards are a challenge, the Obstacle Limitation Surface may be subject to a minor penetration by the apron flood lighting system with CASA approval.	S	Industry feedback indicates that it is sometimes difficult to balance apron luminance requirements and providing an adequate number of light sources whilst still ensuring lighting infrastructure remains outside of the OLS. This change allows a proposed penetration to be reviewed and possibly approved subject to mitigation being applied (i.e. marking, lighting and reporting to aircraft operators).	Section 9.113

 9.16.4 New standards for apron floodlighting. Luminance requirements would be linked to the nominated aircraft code letter and the nature of operation on the particular aircraft parking position (e.g. air transport versus general aviation and other operational types). A new 10 lux luminance standard has been introduced as a step between the ICAO compliant 20 lux requirement and the existing 5 lux requirement for 'small' aircraft. Existing apron floodlighting systems would be considered grandfathered until the parking position was increased in capability or the lighting system itself was either upgraded or replaced. 	S	Apron floodlighting provides a safety benefit for night time aircraft turnaround operations including passenger facilitation on the apron. The existing standard permits only 5 lux of apron floodlighting for Code 3C aircraft which can typically carry anywhere between 31 passengers (i.e. SAAB 340) and 140 passengers (i.e. B737-700). The proposed change aligns more closely with Annex 14 standards for larger capacity aircraft commonly utilised in air transport operations. It would also provide some relief for parking positions used by large aircraft but are not utilised for air transport operations (i.e. freighter only or standoff parking positions which do not facilitate bussing operations at night). The lower limit of 10 lux reflects a different risk profile when compared to safe passenger facilitation. The proposed change furthermore resolves ambiguity with the provision of flood lighting for aircraft which are close to the existing trigger criteria (i.e. Code 3C aircraft types) which being defined as 'small' does not align with the intent of the standard and public expectation.	Section 9.114
New standard: Advanced Visual Docking Guidance Systems included from Annex 14, Volume I.	S	Annex 14, Volume I alignment. The existing MOS did not contain these standards despite their common use at many aerodromes.	Sections 9.121-9.122
9.18.1 Existing standards would be broadened to ensure MAG signs are obscured (or updated) during periods of unserviceability.	S	MAG signs, especially declared distance information, can provide hazardous information if not obscured (or updated) where the runways lengths are impacted during works.	Section 9.125

New standard: Lighted visual aid to indicate a temporary runway closure. Note: The proposed standard has been based on a French (DGAC) and United States (FAA) combined specification.	S	Some aerodrome operators had requested a specification for lit runway unserviceability crosses.	Sections 9.126-9.128
9.19.1 Standards would be merged with other vehicle control standards. The revised standards now allow the use of standard vehicle equipped warning lights (i.e. hazard lights) at aerodromes not used by air transport operations	S	Some industry sectors have requested additional flexibility when providing vehicle warning lights at lower risk aerodromes.	Section 14.04
9.19.3 Omitted.	0	CASA cannot regulate lights on roads and in car parks unless they are hazardous to aircraft. CAR 94 provides the required power outside of MOS Part 139.	
9.20.2 Rewritten with standard clarified against Part 175 requirements. Reference to the word 'occult' has been removed.	S	This section has been rewritten in line with the new CASR Part 175 and in line with the Data Product Specification provided by the AIS (Airservices). Content which is currently published in the AIP but does not either form part of the existing Part 139 MOS or the Airservices Data product specification needs to be included in the revised standard - otherwise there is no legislative basis to report this safety information. The term 'occult' is not in general use and is covered by the term 'flashing'	Section 9.135 Part 5, Divisions 1 and 2.

 9.21 The existing standards would be amended to reflect a revised scope of light monitoring and maximum intensity compliance within the aerodrome boundary which is the aerodrome operators' responsibility. Standards would be updated to reflect other hazards such as lasers, flashing lights and reflective surfaces which may exist on the aerodrome. 	S	Aerodrome operator has limited influence outside of their boundary but has a responsibility to monitor for hazardous light sources within. Hazards to aircraft from either directed or reflected light energy can occur from lasers, flashing lights and also reflective surfaces on the aerodrome. Reports made to CASA would then result in an assessment. CASA would then provide advice for any required action.	Sections 9.141 and 9.142
9.22 Omitted.	0	These requirements are outside of CASA scope. CASA cannot regulate electrical safety matters.	
10.1.1	0	Educational in nature and not a standard.	
Omitted.			
10.1.2	0	Educational in nature and not a standard. Replaced by	Parts 10 and 11
Omitted.			

 New standard: Aerodrome manual and operating procedures. Detailed prescriptive content in the existing Appendix 1 to CASR 139.095 (and other related regulations including but not limited to 139.100, 139.145 etc.), would be relocated from the regulation down to the MOS tier. Existing aerodrome manual provisions has been redrafted to be more outcome based. The revised Aerodrome Manual design is intended to be more scalable and flexible. The required technical content is intended to be commensurate against aerodrome operational complexity. The aerodrome manual can now either be hard copy or fully electronic. Document control requirements would be further clarified. The linking of subsidiary documents from the aerodrome manual has been further clarified. Note: CASA intends to release a free online 'Manual Authoring and Assessment Tool' to assist registered aerodromes with the proposed transition of their existing 'documented safety functions' (in writing) to the revised aerodrome manual requirements. Existing certified aerodromes would also be welcome to use the tool in order to administrate their future manuals (if desired). 	S	The revised regulation design is intended to only provide the head of power for the MOS. Technical details then are located within the MOS tier. Industry has requested that more outcome based standards are provided with regard to aerodrome manual design, document control and utilisation. Industry had also requested additional clarity with the linking of subsidiary documents to the aerodrome manual. The project policy is to deliver a simple but scalable certification structure into the future. Aerodrome manuals serve two key purposes in support of the certificate. The first is to provide evidence during entry control that an authorisation to operate an aerodrome can be granted by CASA to the operator. Secondly, the manual describes the operating procedures used ensure a safe and compliant aerodrome operation. For registered aerodromes, existing 'documented safety functions' (in writing) requirements in the MOS are ambiguous — this can lead to both uncertainty from the operator and the regulator with regard to the systems present to ensure the safe and compliant operation of the regulated aerodrome.	Parts 10 and 11
10.1.3 Existing content which is educational in nature would be moved to supporting guidance materials. The remainder of the existing standards would be merged into new section containing standards for personnel.	S	Standards would be updated based on industry and internal review. The revised standards would be relocated to a dedicated section.	Part 13

Updated standard: Aerodrome personnel functions. The 'Accountable manager' position has been added as a formal nomination by the aerodrome operator. The accountable manager is responsible for ensuring the aerodrome complies with the relevant standards and regulations. This regulation requires that the person nominated for this position is also be able to finance the operation and maintenance of the aerodrome and ensure adequate resources are available. The MOS requires this position holder to have knowledge of the civil aviation legislation and standards applicable to the inspection, reporting, operation and maintenance of the aerodrome.	S	This position is currently 'implied' through the existing legislation - each authorisation holder is always responsible for any authorisation provided from CASA. The proposed addition of the term 'Accountable manager' in the revised CASR Part 139 regulation and the MOS formalises this relationship. Furthermore, this change brings Part 139 into line with other CASR Parts and the resulting authorisations which require an Accountable Manager.	Part 13
 10.1.4 Updated standard: Safety Management System. Standards for SMS are now based on the ICAO Annex 19 framework. SMS purpose with regard to 'aerodrome hazards affecting aircraft operations' (and vice versa) has been clarified. SMS requirements are now subject to a trigger criteria based on air transport passenger movements and/or aircraft movements rather than an arbitrary trigger. A lower tier Risk Management Plans (RMP) would be required for some aerodromes below the SMS trigger. The core SMS framework applies to all aerodromes above the trigger. Expanded matters (full Annex 19 compliance) are then applicable to those international aerodromes with scheduled air transport operations. 	S	Industry had requested clarification between the intent and purpose of an SMS. In the exiting MOS, SMS requirements were not subject to clear standards in the design, operation and maintenance of an SMS despite the regulation requiring an SMS for all certified aerodromes. The graduated trigger criteria between an RMP being required and then ultimately an SMS is designed to provide a 'scalable' and 'commensurate' approach to safety and risk management. CASA however would still recommend that all aerodromes maintain an SMS.	Part 25

 10.2.1 The reduction of serviceability inspections to twice per week and the scheduling of these inspections would be clarified. The timing of inspections for aerodromes with scheduled air transport operations has also been clarified. The ability to 'split' checks across a staggered serviceability inspection has also been clarified. The checking for items which are visible from the aerodrome has been clarified. The detection of obvious hazards into the PANS-OPS airspace immediate to the aerodrome (i.e. Visual Segment Surface) has been clarified. The requirement for the monitoring for NOTAM during serviceability inspections has been clarified as applying to NOTAM issued by the aerodrome operator. 	S	Industry requested further clarification as to the scheduling and timing of inspections. 'Safety critical' hazards on the movement area are required to be detected prior to the first air transport operation of the day. Where not possible to detect all items due to a lack of daylight and an early morning aircraft departure, the revised standards allow the checking of various items to be staggered until the complete inspection can be completed once daylight becomes available. This proposal is intended to ensure safety outcomes are balanced against operational flexibility. The proposal addresses an existing disconnect between the regulation and the MOS regarding the monitoring of PANS-OPS immediate to the aerodrome.	Sections 12.01 and 12.02
10.3 Omitted.	0	Now regulated by Part 175 and subject to procedures issued by Airservices Australia.	
10.4 Omitted.	0	Now regulated by Part 175 and subject to procedures issued by Airservices Australia.	
10.5 Omitted.	0	Now regulated by Part 175 and subject to procedures issued by Airservices Australia. Content may be moved to supporting guidance materials.	

10.6.1 Omitted.	0	Now regulated by Part 175 and subject to procedures issued by Airservices Australia.	
 10.6.2 Required competencies for aerodrome reporting officers would be expanded upon to ensure: Linkage to Part 175 reporting obligations; and Knowledge of procedures including works safety, aerodrome emergency response, airside vehicle control (if applicable), aircraft parking control (if applicable) and low visibility operations (if applicable). 	S	Addresses implied linkages in the current MOS which are not strictly expressed within the core competencies required from every aerodrome reporting officer. Each applicable function however is critical to aerodrome safety.	Section 13.01
10.6.3 Existing requirements would be clarified and updated with regard to the new Part 175.	E	Consequential amendment to align Part 139 reporting functions with Part 175 requirements.	Section 12.04
10.6.4 Existing requirements amended to reflect ability for the aerodrome operator to monitor for hazardous activities visible from their aerodrome boundary.	E	Aerodrome operators are limited in their ability to monitor for hazardous activities outside of their boundary. Various provisions in the MOS would be amended to reflect this limitation. The revised proposals intend to strengthen the liaison arrangements between the aerodrome operator and their key stakeholders, in the aerodrome vicinity, who also have a shared responsibility to support monitoring functions at the aerodrome.	Various including (but not limited to): Parts 7, 17 and 19; and Section 9.141

10.7 Revised standard: Aerodrome emergency planning and response.	S	Standards would be updated based on industry feedback and an internal review. Industry through consultation had previously requested more flexibility with emergency planning arrangements.	Part 24 and Sections 11.12-11.13
Aerodrome Emergency Planning requirements are now subject to a trigger criteria based on air transport passenger movements and/or aircraft movements rather than an arbitrary trigger.		The new standards align more closely with Annex 14 Volume I with regard to emergency testing arrangements.	
The core emergency planning framework including emergency committees, emergency plans and emergency exercises would apply fully to all aerodromes above the trigger and also all international aerodromes with scheduled air transport operations. For aerodromes below the applicable trigger, emergency plans can reflect local or state emergency arrangements. This is permissible where the aerodrome is fully recognised and incorporated into the local emergency plan arrangements. In other cases, a dedicated aerodrome emergency plan is still required.		Duplication between federal regulations and standards against local and state emergency planning legislation has been resolved where possible. Alternative compliance options such as recognising local and state emergency management arrangements are intended to reduce regulatory requirements. These are available to lower risk aerodromes which fall below the various trigger criteria.	
For aerodromes below the applicable trigger, emergency testing requirements would be replaced with emergency preparedness arrangements. For aerodromes above the trigger, the additional option to test a plan via modular testing rather than through a full exercise has been included. This approach is based on Annex 14, Volume I.			
General updates would be made to the emergency standards to reflect electronic mapping and GIS capabilities available to response agencies.			
Disabled aircraft recovery arrangements are to form part of the generic Aerodrome Manual requirements.			

10.8	0	Educational in nature and not a standard. Some content likely to be preserved in guidance materials.	
 10.9.1 -10.9.3 Updated standard: Airside Access including vehicle control. Application of standard for vehicle control has been clarified to apply to aerodromes with scheduled air transport operations. The need for airside access permits has been clarified as applying to aerodromes with 350,000 scheduled air transport passenger movements per annum. Driver rules have generally been updated. The application of the 3m clearance to aircraft has been clarified as being lateral clearance and not vertical. Existing aerodromes facilities however are grandfathered until the next upgrade or replacement. Carriage of radio requirements for vehicles has been clarified. Airside vehicle lighting requirements would be updated. The revised standards now allow the use of standard vehicle hazard lights (i.e. hazard lights) for aerodromes not used by air transport operations. 	S	Existing standards would be updated based on industry and internal review. Industry had requested clarification with vehicle control and airside vehicle lighting arrangements. Consequential amendments are required from the new CAR 166 and CASR Part 64 with regard to radio carriage requirements. Some industry sectors requested additional flexibility with providing vehicle warning lights at low risk aerodromes.	Part 14

10.9.4 Omitted.	0	Technical standards for electronic surveillance equipment are no longer up to date. Revised technical specifications for 'Electronic Surveillance Equipment Fitted to Vehicles' are proposed to be added as a condition to certificates issued to those Certified Aerodromes with ground surveillance (those with A-SMGCS). This allows for easier amendment in response to changes to technical specifications for such equipment as they continue to develop. Other content to be moved to new guidance material.	
 10.10.1 - 10.10.7 Updated standard: Airside works safety. Trigger criteria for the production of a MOWP has been revised to apply to aerodromes with either scheduled air transport operations or those which have fixed based emergency services aircraft. Prior notice requirements to close an aerodrome (due to works) would be clarified. Consultation requirements during MOWP preparation would be clarified. Prior distribution and update requirements following MOWP preparation would be clarified. 	S	Industry had requested further clarification with some of the existing works safety arrangements. Other industry sectors had requested additional prior notice of MOWP and also the assurance that they would receive all subsequent updates made to the MOWP by the aerodrome operator. Emergency services aircraft requested that they are consulted during works planning to ensure their operations can be maintained during works periods.	Section 15.01
10.10.8 The general requirements for the provision of visual aids during periods of works would be relocated to the relevant sections of the revised MOS.	E	Resolves duplication.	Various including (but not limited to): Parts 8, 9 and 14

10.10.9	E	Resolves duplication.	Part 14.
Radio carriage requirements during periods of works would be relocated to the relevant sections of the revised MOS.			
10.10.11 A provision is now included to allow aerodrome operators to exceed maximum transverse and longitudinal slopes when tying into the existing runway surface during an overlay - this is permissible provided no adverse hazard is created and the decision is documented in the MOWP.	S	Industry through feedback had requested that the existing standards be made more flexible for the purposes of ramping to an existing runway surface.	Section 15.05
10.10.12 Provision is now included to allow conditional trenching to an area greater than specified in the existing MOS.	S	Industry through feedback had requested that the existing standards are made more flexible for the purposes of trenching within the runway strip. The existing MOS standard can only be exceeded in cases where it does not crease an adverse hazard for aircraft and the proposal has been consulted with affected parties (and CASA) during the preparation of the Method of Working Plan.	Section 15.06
10.11The MOWP sequence and content has been clarified and further revised.Copies of MOWP are now required to be sent to any fixed emergency service organisations operating at the aerodrome.	S	A general review and clarification of the MOWP was required. Changes would be made to reflect current use of electronic plans, maps and diagrams. Aerodrome works can impact upon any fixed emergency services on the aerodrome and may result in operational limitations to their essential operations. Adding these recipients to the MOWP distribution list provides a safety enhancement.	Section 15.02

10.12	E	Part 175 consequential amendment.	Section 13.01
General clarifications would be made to work safety officer requirements with align with the revised Part 175 requirements.			
10.13	S	Resolved ambiguity with the existing standard.	Section 11.15
Aircraft parking control requirements would be revised to apply to international aerodromes scheduled. These arrangements and then optional for other aerodromes.			
The supporting Aerodrome Manual content requirements would be clarified.			

10.14	S	Resolves the current ambiguity with regard to wildlife	Part 17
 Revised standard: Wildlife Hazard Management. The existing structure of the standard has been revised around monitoring, assessment, reporting and mitigation processes. Wildlife detection, monitoring and observation requirements would be clarified to include the area of aerodrome operator responsibility. Monitoring requirements outside of the aerodrome boundary have also been clarified. Wildlife assessment requirements are now formally linked to the SMS or RMP hazard assessment processes (as applicable). Reported near miss events must be considered as a trigger for assessment in addition to reported strikes. The provision of a Wildlife Hazard Management Plan is now subject to trigger criteria based on air transport passenger movements and/or aircraft movements rather than an arbitrary trigger. CASA can waive the requirement for a plan to be provided, via a conditional approval, if a low wildlife hazard risk at a particular aerodrome can be demonstrated. Wildlife Hazard Management Plan requirements have also been generally updated. The list of acceptable 'experts' who are permitted to prepare such a plan has been expanded. Wildlife hazard reporting requirements would be further clarified. 		 monitoring outside of the aerodrome boundary. Hazard assessment functions exist in both the SMS and RMP. The wildlife hazard assessments need to align with this process. The change to the trigger criteria for the production of a Wildlife Hazard Management Plan now follows a risk based approach. Additional experts are now authorised to prepare the wildlife hazard management plan they can demonstrate the relevant expertise to address the particular hazard. Training requirements which are currently contained in guidance, under AC139-26, are proposed to be upgraded to the proposed revised standards. This change clarifies the expected knowledge and proficiency requirements for the various tasks. This change is expected to have minimal impact as Aerodrome Reporting Officer training normally addresses these requirements in any case. Reporting requirements were updated to reflect the current Part 175 requirements. 	
10.15.1 FOD removal clarified as applying to all movement areas.	S	Resolves ambiguity in the existing standards. The removal of any FOD once detected is an essential	Section 18.01

 10.15.2 Legacy transition requirement would be removed. The application of friction monitoring clarified for all international aerodromes with scheduled air transport operations has been clarified. Testing requirements are now cross linked to runway friction requirements under the revised runway surface standards (subsection 6.08). 	S	Friction testing at international aerodromes is essential for safety monitoring and measurement and should not be dependent upon the aerodrome reference field length number (which may not reflect the operating mode of the facility and the resultant risk).	Sections 18.02 and 6.08
10.15.3	S	Clarifies matters and resolves duplication.	Section 6.08
Management of groved surfaces has been clarified under the revised runway surface standards (subsection 6.08).			
10.15.4	S	Clarifies matters and resolves duplication.	Section 6.08
Management of surface irregularities are now clarified under the revised runway surface standards (subsection 6.08).			
10.15.5	S	Clarifies matters and resolves duplication.	Section 6.08
Management of natural runway surfaces is now clarified under the revised runway surface standards (subsection 6.08).			
10.16	0	Resolves duplication.	Part 19
Existing section has been removed and replaced by the new Communications Navigations Surveillance and Air Traffic Management Section (CNS/ATM).		The intent of the revised standards is for aerodrome operators to understand and monitor for activities and/or hazards which may compromise the correct operation of CNS/ATM facilities. Access control by the aerodrome operator for both vehicles and personnel in proximity to such facilities is required.	

10.17 Minor editorials would be made to the existing standards.	E	A general review of requirements, including feedback from industry, has resulted in minor editorials being required.	Part 23
Special Authorisation Category I and II requirements would be combined into this section from the existing MOS subsections 2.1.10 - 2.1.11. Other materials are intended to be relocated in supporting guidance.		Like sections would be combined into the new Part 23.	

10.18	S	Establishes a criteria for the conduct of an aerodrome	Part 12
Revised standard: Aerodrome Technical Inspections.		To resolve potential cost impact at lower risk	
Aerodrome Technical requirements are now subject to a trigger		aerodromes, the schedule for some elements of an	
criteria based on air transport passenger movements and/or		aerodrome which could result in additional expense (if	
aircraft movements rather than an arbitrary trigger.		outsourced) are proposed be conducted less frequently ('split' inspection).	
The core aerodrome technical inspection requirements would			
apply fully to all aerodromes above the highest trigger and to all		Reports sent to CASA allow the regulator to risk assess	
international aerodromes with scheduled air transport operations.		the operator when establishing their surveillance	
A credreme with fewer meyoments but would exceed the second		priority. A thorough and accurate technical inspection	
trigger would have the option to delay some aspects of the		narticular aerodrome if it is considered a lower risk	
technical inspection for their payements, drainage and lighting		Furthermore, this approach allows for aerodromes to	
systems ('spilt' inspection) - this delay is from one year to two		conduct a 'self-assessment' as requested by industry	
years to reflect that the risk at these aerodromes is lower		under the Aviation Safety Regulatory Review	
		recommendations from 2014.	
Requirements for technical inspectors and pre-requisite			
qualifications, knowledge and experience would be clarified.		Industry feedback indicated concern where a	
Technical inspection reports must be made to CASA_CASA_con		recommendation from an aerodrome technical	
request a progress report on the accepted action from an		The MOS provides a process for addressing such a	
aerodrome technical inspection and evidence of actions		situation. Once the decision is documented, the	
undertaken.		aerodrome operator is responsible for managing the	
		outcome.	
Aerodromes operators can reject a recommendation from an			
aerodrome technical inspection however this rejection and the		Validation or reported information is an existing Part 175	
underlying reason must be documented.		requirement and has been included in the revised MOS	
For some designed below both to shall be a setting the set of the set		as a consequential amendment. This already applies to	
pror aerodromes below both technical inspection triggers, only an		existing Registerea Aeroaromes.	
of information in AIP would be required. Only where a validation			
identifies an issue must this information be reported to CASA			

10.19 Minor editorials.	E	A general review of requirements resulted in minor editorials being made to the existing standard.	Sections 23.07 - 23.09
 11.1.1 - 11.1.15 Updated and revised standards: The scope of the existing MOS content has been revised. Aerodrome operators are only responsible for monitoring for potential 'hazards' on each CNS/ATM and MET facility within their boundary. Reports are then made to the facility owner if a hazard is identified. Matters not directly under the scope of Part 139 would be removed. Technical monitoring requirements for each CNS/ATM facility would be updated based on latest technical advice from Airservices Australia. New inclusions include the latest communications system designs and also ground based satellite augmentation systems. Aerodrome operator responsibilities would be refined to those within the aerodrome operator's control — predominantly along the interface of these sites, control of access and also maintenance activities around CNS/ATM and Meteorological facilities. Specifications would be included as per a technical submission from the Burgay of Metagralogy. 	S	Clarifies matters. Some Part 171 matters are outside the scope of Part 139. Consequential amendments required from CASR Part 171. Existing MOS technical specifications were out-dated. Updated specifications would be included as per a technical submission from Airservices Australia. Satellite communications systems form part of the overall CNS/ATM network and also require aerodrome operator assistance to monitor for potential hazards within the aerodrome boundary. The BOM have provided CASA with a detailed submission to ensure that meteorological facilities within the aerodrome operator boundary are also appropriately monitored. Meteorological facilities and therefore require aerodrome operator assistance to monitor for potential hazards within the aerodrome boundary.	Part 19
11.1.16 - 11.1.19 Minor editorials.	E	General review of requirements resulted in minor editorials.	Part 20

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11.1.20	0	The existing Advisory circular is proposed to remain.	
Responsibility for compass swing use is the aircraft operator and not aerodrome operator responsibility.		Whilst CASA does not approve a compass swing bay location, guidance can be provided on these facilities if provided by the aerodrome operator. Any such facility needs to be validated by the aircraft operator as being appropriate prior to use.	
11.1.21	0	Narrative and not a standard.	
Removed.			
11.1.22Minor editorials.Maximum anchor heights are now aligned with the maximum 25mm 'step up' specification which is used for other standards for movement area facilities and pavement design.	S	General review of requirements resulted in minor editorials.	Part 21
Chapter 12 Removed.	0	This chapter has been removed as the proposed project policy is to issue a certificate to the existing registered aerodrome operators that either achieve the revised trigger for certification or voluntarily 'opt-in'. The new certification requirements however are scalable to the risk of the aerodrome and regulatory requirements. With the exception of an aerodrome manual, impact on existing registered aerodromes by the proposed changes is expected to be minimal. The MAAT tool is also proposed to assist with this transition.	
14.1	0	Narrative and not a standard.	
Removed.			

 14.2 Updated and revised standards: Certified Air Ground/Ground Radio Service (CA/GRS). The existing 10 year limit on a former flight service licence holders has been removed as a core requirement for the issue of a CA/GRS certificate. Links to Defence or ICAO recognised Air Traffic Controller licences would be included as additional pre- requisite options to demonstrate competency. The existing 10 year limit on a CA/GRS certificate has also been removed. Part 64 (radio operators) authorisations are now included in the standard. References to MBZ would be removed. Weather observation qualifications would be further clarified. 	S	These changes address current limitations with the existing CA/GRS limitations which exclude qualified persons from carrying out this role. Consequential amendments are required from CASR 64. MBZ no longer exist.	Section 22.01
 14.3 Updated standards: Aerodrome frequency confirmation system. Links to CA/GRS would be clarified in this section. Technical requirements would be changed to outcome based requirements. References to MBZ would be removed. 	S	Technology has developed and the existing MOS is now out of date. System performance requirements are now 'outcome based' to allow for further development and innovation. MBZ no longer exist.	Section 22.02
14.4 Minor editorials.	E	General review of requirements has resulted in minor editorials being required.	Section 22.03

New standard: Risk Management Plan SMS requirements are now subject to a trigger criteria based on air transport passenger movements and/or aircraft movements rather than an arbitrary trigger. Risk Management Plans (RMP) would be required for some aerodromes below the SMS trigger. The core RMP framework acts as lower tier (entry level) system for risk management prior to an SMS being required. An SMS however would utilise many functions from the RMP if an aerodrome subsequently reaches the SMS trigger. Existing corporate risk management programs can be recognised	S	The graduated trigger criteria between an RMP being required (and ultimately an SMS) are intended to provide a scalable and commensurate approach to safety and risk management. Existing corporate risk management programs can be recognised as an RMP under certain conditions.	Part 26
as an RMP so long as the aerodrome risks are being managed through that program.			