

ANNEX D TO PP 2207AS

Tabular comparison – Part 172 MOS Ch 1-9 – Current vs proposed

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
		1.006	<p>CHAPTER 1 PRELIMINARY</p> <p>1.006 Tables, Figures and Notes</p> <p>In this instrument:</p> <ul style="list-style-type: none"> (a) if a numbered Figure, in the form of a drawing, diagram or similar representation, is expressed as illustrating matters, it is guidance that is to be taken into account in interpreting the provision which refers to the Figure; and (b) if a numbered Figure, in the form of a drawing, diagram or similar representation, is expressed as showing matters, it is to be read with, and may supplement, the information in the provision which (c) a Note provides information and does not contain standards unless the contrary intention is expressed in a provision for the Note. <p><i>Note</i> Tables and Figures are not numbered sequentially. For ease of reference, they are numbered by reference to the section or subsection which first refers to the Table or Figure.</p>	
1.2.1.1	<p>Chapter 1: Introduction</p> <p>Section 1.2 Abbreviations and Definitions</p> <p>1.2.1 Abbreviations</p> <p>Unless otherwise stated, abbreviations in this MOS have the meanings given in the AIP or as follows:</p>	1.007	<p>1.007 Definitions and abbreviations</p> <p>In this MOS:</p> <p>LJR (short for low jet route) means a route, or part of a route, at or below 5000 FT AGL used by military aircraft for low level, high speed operations.</p> <p>MLJ (short for military low jet) means a military aircraft operating on a low jet route.</p>	
1.2.2.1	<p>1.2.2 Definitions</p> <p>Unless otherwise stated, words in this MOS have the meanings given in the AIP or as follows:</p>		Covered by the above	
1.2.2.1	<p>ADS-C agreement</p> <p>A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the air traffic services unit and frequency of ADS-C reports which have to be agreed to prior to the provision of air traffic services).</p>		No equivalent	<p>ADS-C agreement.</p> <p>A reporting plan which establishes the conditions of ADS-C data reporting (i.e. data required by the air traffic services unit and frequency of ADS-C reports which have to be agreed to prior to using ADS-C in the provision of air traffic services).</p> <p><i>Note.</i>— The terms of the agreement will be exchanged between the ground system and the aircraft by means of a contract, or a series of contracts.</p>
1.2.2.1	<p>ATS surveillance service</p> <p>Term used to indicate an air traffic service provided directly by means of an ATS surveillance system.</p>		No equivalent	<p>ATS surveillance service. A term used to indicate a service provided directly by means of an ATS surveillance system.</p>
1.2.2.1	<p>ATS surveillance system</p> <p>A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.</p> <p><i>Note</i> A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal</p>		No equivalent	<p>ATS surveillance system. A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.</p> <p><i>Note.</i> — A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of</p>

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	<i>to, or better than, monopulse SSR.</i>			<i>safety and performance equal to or better than monopulse SSR.</i>
1.2.2.1	<p>Automatic dependent surveillance — broadcast</p> <p>A means by which aircraft, aerodrome vehicles and other objects can automatically transmit or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.</p>		No equivalent	<p>Automatic dependent surveillance — broadcast (ADS-B).</p> <p>A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.</p>
1.2.2.1	<p>Automatic dependent surveillance — contract</p> <p>A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.</p>		No equivalent	<p>Automatic dependent surveillance — contract (ADS-C).</p> <p>A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.</p> <p><i>Note.— The abbreviated term “ADS contract” is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.</i></p>
1.2.2.1	<p>Flight path monitoring</p> <p>The use of ATS surveillance systems for the purpose of providing aircraft with information and advice relative to significant deviations from nominal flight path, including deviations from the terms of their air traffic control clearances.</p> <p><i>Note Some applications may require a specific technology, e.g. radar, to support the function of flight path monitoring.</i></p>		No equivalent	<p>Flight path monitoring. The use of ATS surveillance systems for the purpose of providing aircraft with information and advice relative to significant deviations from nominal flight path, including deviations from the terms of their air traffic control clearances.</p> <p><i>Note. — Some applications may require a specific technology, e.g. radar, to support the function of flight path monitoring.</i></p>
1.2.2.1	<p>Identification</p> <p>The situation which exists when the position indication of a particular aircraft is seen on a situation display and positively identified by ATC.</p>		No equivalent	<p>Identification. The situation which exists when the position indication of a particular aircraft is seen on a situation display and positively identified.</p>
1.2.2.1	<p>Position indication</p> <p>The visual indication, in non-symbolic or symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object.</p>		No equivalent	<p>Position indication. The visual indication, in non-symbolic and/or symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object.</p>
1.2.2.1	<p>Position symbol</p> <p>The visual indication in symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object obtained after automatic processing of positional data derived from any source.</p>		No equivalent	<p>Position symbol. The visual indication in symbolic form, on a situation display, of the position of an aircraft, aerodrome vehicle or other object, obtained after automatic processing of positional data derived from any source.</p>
1.2.2.1	<p>Positive radio fix</p> <p>(a) An NDB or locator site (when propagation is normal); or</p> <p>(b) A VOR, TACAN site or marker beacon.</p>		No equivalent	Nil

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1.2.2.1	Procedural control Term used to indicate that information derived from an ATS surveillance system is not required for the provision of air traffic control service.		No equivalent	Procedural control. Term used to indicate that information derived from an ATS surveillance system is not required for the provision of air traffic control service.
1.2.2.1	Procedural separation The separation used when providing procedural control.		No equivalent	Procedural separation. The separation used when providing procedural control.
1.2.2.1	PSR blip The visual indication, in non-symbolic form, on a situation display, of the position of an aircraft obtained by primary radar.		No equivalent	PSR blip. The visual indication, in non-symbolic form, on a situation display of the position of an aircraft obtained by primary radar.
1.2.2.1	Radar approach An approach in which the final approach phase is executed under the direction of a controller using radar.		No equivalent	Radar approach. An approach in which the final approach phase is executed under the direction of a controller using radar.
1.2.2.1	Radar clutter The visual indication on a situation display of unwanted signals.		No equivalent	Radar clutter. The visual indication on a situation display of unwanted signals.
1.2.2.1	Safety case A safety case provides documented evidence and argument that a service or facility, or a proposed change to the design of a service or facility, meets safety objectives or levels for the service or facility.		No equivalent	Nil
1.2.2.1	Situation display An electronic display depicting the position and movement of aircraft and other information as required.		No equivalent	Situation display. An electronic display depicting the position and movement of aircraft and other information as required.
1.2.2.1	SSR response The visual indication, in non-symbolic form, on a situation display, of a response from an SSR transponder in reply to an interrogation.		No equivalent	SSR response. The visual indication, in non-symbolic form, on a situation display, of a response from an SSR transponder in reply to an interrogation.
1.2.2.1	Vectoring Provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system.		No equivalent	Vectoring. Provision of navigational guidance to aircraft in the form of specific headings, based on the use of an ATS surveillance system.
1.2.2.1	VFR-on-top An IFR flight with ATC authorisation to operate in VMC at or below FL180 in Class E airspace at any appropriate VFR altitude or flight level.		No equivalent?	To be defined in the Part 91 MOS: VFR-on-top is an ATC authorisation for an IFR flight in Class E airspace to operate in VMC at VFR cruising levels.
	No equivalent	1.010	1.010 Non-application of the standards (1) CASA may approve in writing that an ATS provider is not required to meet a standard specified in this MOS or the relevant ICAO document. (2) An approval under subsection (1) must specify the provisions to which the approval applies, and may be 1 or more of the following: (a) time-limited or open-ended as to its duration;	Based on Part 139 Manual of Standards: 2.06 Non-application of the standards (1) CASA may approve in writing that an operator is not required to meet a standard specified in this MOS. (2) An approval under subsection (1) must specify the

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			<p>(b) made subject to conditions.</p> <p>(3) For subsection (1), CASA may grant an approval if the ATS provider:</p> <p>(a) applies in writing for an approval; and</p> <p>(b) identifies each of the relevant standards, by reference to the specific provision in the MOS or the relevant ICAO document, which it is proposed will not be met, and explains why it will not be met; and</p> <p>(c) states the length of the period during which each relevant standard will not be met; and</p> <p>(d) sets out in an accompanying safety assessment:</p> <p>(i) the effect on aviation safety of not meeting each of the relevant standards; and</p> <p>(ii) either:</p> <p>(A) the measures proposed to mitigate those effects; or</p> <p>(B) the measures proposed to achieve the same safety outcome as the relevant standards in the MOS or the relevant ICAO document, as the case may be, would achieve; and</p> <p>(e) satisfies CASA that the approval will not have any adverse effect on aviation safety.</p>	<p>provisions to which the approval applies, and may be 1 or more of the following:</p> <p>(a) time-limited or open-ended as to its duration;</p> <p>(b) made subject to conditions.</p> <p>(3) For subsection (1), CASA may grant an approval if the aerodrome operator:</p> <p>(a) applies in writing for an approval; and</p> <p>(b) identifies each of the relevant standards, by reference to the specific provision in the MOS, which it is proposed will not be met, and explains why it will not be met; and</p> <p>(c) states the length of the period during which each relevant standard will not be met; and</p> <p>(d) sets out in an accompanying safety assessment:</p> <p>(i) the effect on aerodrome and aviation safety of not meeting each of the relevant standards; and</p> <p>(ii) either:</p> <p>(A) the measures proposed to mitigate those effects; or</p> <p>(B) the measures proposed to achieve the same safety outcome as the relevant standards in the MOS would achieve; and</p> <p>(e) satisfies CASA that the approval will not have any adverse effect on aviation safety.</p>
2.1.1.1	<p>Chapter 2: Operations Manual</p> <p>Section 2.1 General</p> <p>2.1.1 Introduction</p> <p>An Operations Manual shows how and where an ATS provider provides, or proposes to provide, air traffic services.</p>	2.0105.01	<p>CHAPTER 2 STANDARDS FOR PART 172</p> <p>Division 1 Exposition</p> <p>2.105 Contents of exposition</p> <p>(1) This section is:</p> <p>(a) made for subsection 172.060 (1) of CASR; and</p> <p>(b) prescribes the matters that must be included or addressed in an ATS provider's exposition.</p>	
2.1.2.1	<p>2.1.2.1 An operations manual must contain:</p> <p>(a) a table of contents based on the items in the manual, indicating the page number on which each item begins;</p>	2.0105.02	<p>(2) An ATS provider's exposition must include or address all the following matters:</p>	Omits reference to table of contents
	<p>(b) a description of the provider's organisational structure and a statement setting out the functions that the provider performs, or proposes to perform under CASR Part 172;</p>	2.0105.03	<p>(a) A statement setting out the functions that the provider performs under Part 172of CASR.</p>	
	<p>(c) a description of the chain of command established, or proposed to be established, by the provider and a statement of the duties and responsibilities of any supervisory positions within the organisational structure;</p>	2.0105.04	<p>(b) The name of the provider's accountable manager or accountable managers (as the case may be).</p> <p>(c) A description and diagram of the provider's organisational structure showing formal reporting lines.</p> <p>(d) for each of the key personnel, the following information:</p> <p>(i) the scope of responsibility for the each of the key personnel</p>	

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			(ii) the name of the person appointed to the position;	
	(d) a statement showing how the provider determines the number of operational staff required including the number of operational supervisory staff;	2.0105.06	(f) A description of how the provider determines the number of operational staff, including the number of operational supervisory staff, required to provide its air traffic service at each unit.	
		2.0105.07	(g) For each location or operating position, details of the staff numbers necessary to provide the air traffic services covered by the provider's approval for that location or operating position.	
	(e) a list of the air traffic services that the provider provides, or proposes to provide;	2.0105.08	(h) A list of the services that the provider provides, or proposes to provide, as part of its air traffic service.	
	(f) a statement for each air traffic service, showing the hours of operation of the service;	2.0105.09	(i) The following information about each service: (i) the location from which the service is provided; (ii) the area of Australian territory, and the aerodromes, airspace and ATS routes, that the service covers; (iii) the hours during which the service is available; (iv) the hours of coverage for each supervisory position.	
	(g) a statement, for each air traffic service, that identifies the particular airspace within which the service is provided, or proposed to be provided;		Covered by (i)	
	(h) a statement, for each air traffic service, that identifies the location from where the service is provided, or proposed to be provided;		Covered by (i)	
	(i) if the provider provides, or proposes to provide, an air traffic service for a controlled aerodrome: (i) a description of the manoeuvring area of the aerodrome; and (ii) copy of the parts of the aerodrome emergency plan, set out in the aerodrome operator's aerodrome manual that are relevant to the provision of the service; and (iii) a copy of the procedures set out in the aerodrome operator's aerodrome manual for preventing the unauthorised entry of persons or things onto the manoeuvring area of the aerodrome; and (iv) a copy of the procedures set out in the aerodrome operator's aerodrome manual for the control of surface vehicles operating on or in the vicinity of the manoeuvring area;	2.0105.10	(j) If the provider provides, or proposes to provide, an air traffic service for a controlled aerodrome: (i) a description of the manoeuvring area of the aerodrome; and (ii) copy of the parts of the aerodrome emergency plan, set out in the aerodrome operator's aerodrome manual that are relevant to the provision of the service; and (iii) a copy of the procedures set out in the aerodrome operator's aerodrome manual for preventing the unauthorised entry of persons or things onto the manoeuvring area of the aerodrome; and (iv) a copy of the procedures set out in the aerodrome operator's aerodrome manual for the control of surface vehicles operating on or in the vicinity of the manoeuvring area.	172.130
	(j) a statement of the responsibilities and functions for each operating position;	2.0105.05	(e) For each operational position, including each operational supervisory position, within the organisational structure: (i) a statement of the functions and responsibilities of the position; and (ii) the endorsements and qualifications required for the position (if any); and (iii) if any and if different from the requirements of Part 65 of CASR — the recent experience requirements for the position; and	

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			(iv) if any and if different from the requirements of Part 65 of CASR — the currency requirements (if any) for the endorsements or qualifications.	
	(k) a description of the arrangements made or proposed to be made by the provider to ensure that it has, and will continue to receive, on a daily basis, the information necessary for providing the service;	2.0105.11	(k) A description of the arrangements that ensure the ATS provider receives the services and information necessary for providing its air traffic service.	
	(l) a description of the arrangements made or proposed to be made by the provider to ensure that it has, and will continue to be able to provide, information in connection with its air traffic services to another person whose functions reasonably require that information (includes SAR alerting);	2.0105.12	(l) In accordance with regulation 172.135, a description of the arrangements to ensure the ATS provider is able, and will continue to be able to provide, information in connection with its air traffic services to another person whose functions reasonably require that information.	
	(m) a description of the provider's document and record keeping system;	2.0105.13	(m) A description of the ATS provider's document and record control system, as required by regulation 172.170.	
	(n) a copy of any agreement entered into by the provider in relation to the provision of any of the air traffic services;	2.0105.14	(n) A copy of any agreement (if any) entered into by the provider in relation to the provision of any of the air traffic services, including provision of a service in cooperation or by arrangement with another person.	
	(o) a copy of the document that sets out the provider's safety management system;	2.0105.15	(o) A copy of the ATS provider's safety management system, as required by regulation 172.145.	
		2.0105.16	(p) A copy of the ATS provider's system for managing its fatigue-related safety risks as required by 172.P145	
	(p) a copy of the provider's contingency plan;	2.0105.17	(q) A copy of the ATS provider's contingency plan, as required by regulation 172.150.	
	(q) a copy of the provider's security program;	2.0105.18	(r) A copy of the provider's security program, as required by regulation 172.155;	
	(r) a description of the processes and documentation used to present to staff the relevant standards, rules and procedures contained in ICAO Annexes 10 and 11, ICAO PANS-ATM, ICAO Regional Supplementary Procedures, Chapter 10 of this MOS, and any of the provider's site-specific instructions for the provision of air traffic services;	2.0105.19	(s) A description of the processes and documents used to present to personnel the relevant standards, rules and procedures mentioned in the following: (i) the Part 172 Manual of Standards; (ii) Annex 10 Volume II and Annex 11 to the Chicago Convention; (iii) ICAO Doc. 4444; (iv) ICAO Doc. 7030; (vi) the aeronautical information publication; (vii) the provider's site-specific instructions for the provision of its air traffic services.	
	(s) a description of the processes and documentation used to provide operational instructions to staff;	2.0105.20	(t) A copy of each document that contains operational instructions for personnel.	
	(t) a description of the procedures to be followed to ensure all operational staff are familiar with any operational changes that have been issued since they last performed operational duties;	2.0105.21	(u) A description of the procedures that ensure all operational staff are familiar with any operational changes that have been issued since they last performed operational duties.	
	(u) a description of the provider's training and checking program;	2.0105.22	(v) A description of the provider's training and checking system, as required by regulation 172.140.	

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	(v) a description of the procedures to be used in commissioning new facilities, equipment and services;	2.0105.23	(w) A description of the procedures used in commissioning new facilities, equipment and services.	
		2.0105.24	(x) A description of the procedures that ensure that all equipment, including software, is operated in accordance with the manufacturer's operating instructions and manuals.	From Part 175 –
	(w) the procedures to be followed for revising the operations manual.	2.0105.25	(y) A description of the ATS provider's process for making changes, including: (i) identifying changes that are significant changes; and (ii) identifying changes that are not significant changes; and (iii) telling CASA and the operator's personnel of the changes;	
		2.0105.26	(z) Details of any recommended practices mentioned in the following documents that the provider does not follow: (i) Annex 10 Volume II and Annex 11 to the Chicago Convention; (ii) ICAO Doc. 4444.	From Part 175 –
3.1.1.1	Chapter 3: ATS Facilities and Equipment Section 3.1 General 3.1.1 Introduction This standard sets out the standards for the design, siting, construction, equipping and maintenance of ATC facilities. Further information is contained in an Advisory Circular.		To be dealt with separately	
3.1.2.1	3.1.2 Control Towers Visibility. A control tower first commissioned after 1 July 2000, must enable the controller to have: (a) adequate visibility to all the manoeuvring area and airspace which are under the controllers' area of responsibility;		To be dealt with separately	
	(b) a view of all runway ends and taxiways, with suitable depth perception, (refer Advisory Circular);		To be dealt with separately	
	(c) maximum visibility of airborne traffic patterns with primary consideration given to the view from the aerodrome control position(s);		To be dealt with separately	
	(d) unobstructed lines of sight from the control tower eye level (refer Advisory Circular) to: (i) the manoeuvring area of the aerodrome; (ii) the runway approach lights and/or graded areas at ground level for distance of 300 M from the threshold along the extended centreline, then upward and outward within the take-off climb area normally at an angle not less than 2.5 degrees; (iii) the first 150 M of any fire routes service roads adjacent to the areas mentioned in (a) and (b) above; (iv) sections of aprons used as a taxiway to a line, at		To be dealt with separately	

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	ground level, 15 M from the apron edge, towards the building line;			
	(e) sufficient visual resolution of all aerodrome movement areas for which he/she has a responsibility;		To be dealt with separately	
	(f) ability to detect movement of a departing aircraft as soon as possible after it has commenced its take-off run; response times must be kept below 4 seconds, although an upper limit of 5 seconds may be approved in exceptional circumstances.		To be dealt with separately	
3.1.2.2	In addition, procedures or facilities are required to ensure: (a) protection from glare, reflection and noise; (b) unobstructed view from an existing control tower cab.		To be dealt with separately	
To be dealt with separately y3.1.2.3	Communication. Each control tower must contain: (a) an appropriate power supply to service the facilities identified in this Section; (b) facilities capable of two-way communications with aircraft, vehicles and persons within its area of responsibility; (c) facilities capable of providing two-way communications: (i) between operational positions within the control tower; (ii) with adjacent ATS units; (iii) with aerodrome rescue and fire fighting services; (d) a means of alerting emergency services; (e) a means of recording air/ground/air and ground/ground communications; (f) AFTN terminal or other means to provide information normally conveyed by AFTN;		To be dealt with separately	Annex 11 6.1.5.1 Air-ground communication facilities shall enable direct, rapid, continuous and static-free two-way communications to take place between an aerodrome control tower and appropriately equipped aircraft operating at any distance within 45 km (25 NM) of the aerodrome concerned. 6.2.2.1.4 An aerodrome control tower, in addition to being connected to the flight information centre, the area control centre and the approach control unit as prescribed in 6.2.2.1.1, 6.2.2.1.2 and 6.2.2.1.3, shall have facilities for communications with the associated air traffic services reporting office, when separately established. 6.2.2.2.2 An approach control unit and an aerodrome control tower shall have facilities for communications with the following units providing a service within their respective area of responsibility: a) appropriate military units; b) rescue and emergency services (including ambulance, fire, etc.); c) the meteorological office serving the unit concerned; d) the aeronautical telecommunications station serving the unit concerned; e) the unit providing apron management service, when separately established.
	(g) binoculars;		To be dealt with separately	ICAO Doc. 4444 7.1.1.2 Aerodrome controllers shall maintain a continuous watch on all flight operations on and in the vicinity of an aerodrome as well as vehicles and personnel on the manoeuvring area. Watch shall be maintained by visual observation, augmented when available by an ATS surveillance system. 7.1.1.2.1 Visual observation shall be achieved through

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				direct out-of-the-window observation, or through indirect observation utilizing a visual surveillance system which is specifically approved for the purpose by the appropriate ATS authority.
	(h) signal lamp, with white, red and green functions.		To be dealt with separately	
3.1.2.4	<p>Displays. A control tower must have the following displays:</p> <ul style="list-style-type: none"> (a) flight data displays (e.g. flight progress boards); (b) meteorological displays which meet the accuracy criteria specified in Annex 3 and which provide at least the following information: <ul style="list-style-type: none"> (i) wind velocity; (ii) barometric pressure; (iii) temperature. <p>Note The meteorological displays must show mean speed and mean direction of the surface wind. Surface wind observations are to be representative of the conditions along the runway and near the touchdown zones. If more than one sensor is used, the displays must identify the sensor being utilised for the observation.</p>		To be dealt with separately	<p>ICAO Doc. 4444</p> <p>4.13.2.1 Sufficient information and data shall be presented in such a manner as to enable the controller to have a complete representation of the current air traffic situation within the controller's area of responsibility and, when relevant, movements on the manoeuvring area of aerodromes. The presentation shall be updated in accordance with the progress of aircraft, in order to facilitate the timely detection and resolution of conflicts as well as to facilitate and provide a record of coordination with adjacent ATS units and control sectors.</p> <p>4.13.2.2 An appropriate representation of the airspace configuration, including significant points and information related to such points, shall be provided. Data to be presented shall include relevant information from flight plans and position reports as well as clearance and coordination data. The information display may be generated and updated automatically, or the data may be entered and updated by authorized personnel.</p>
	<ul style="list-style-type: none"> (b) meteorological displays which meet the accuracy criteria specified in Annex 3 and which provide at least the following information: <ul style="list-style-type: none"> (i) wind velocity; <p>Note The meteorological displays must show mean speed and mean direction of the surface wind. Surface wind observations are to be representative of the conditions along the runway and near the touchdown zones. If more than one sensor is used, the displays must identify the sensor being utilised for the observation.</p>		To be dealt with separately	<p>7.1.4.3 Aerodrome control towers shall be equipped with surface wind display(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists. Where multiple sensor(s) are used, the displays to which they are related shall be clearly marked to identify the runway and section of the runway monitored by each sensor.</p> <p>Annex 3:</p> <p>4.1.1.2 Recommendation.— <i>Representative surface wind observations should be obtained by the use of sensors appropriately sited. Sensors for surface wind observations for local routine and special reports should be sited to give the best practicable indication of conditions along the runway and touchdown zones. At aerodromes where topography or prevalent weather conditions cause significant differences in surface wind at various sections of the runway, additional sensors should be provided.</i></p> <p><i>Note.— Since, in practice, the surface wind cannot be measured directly on the runway, surface wind observations for take-off and landing are expected to be the best practicable indication of the winds which an aircraft will encounter during</i></p>

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				<p><i>take-off and landing.</i></p> <p>4.1.2 Displays</p> <p>4.1.2.1 Surface wind displays relating to each sensor shall be located in the meteorological station with corresponding displays in the appropriate air traffic services units. The displays in the meteorological station and in the air traffic services units shall relate to the same sensors, and where separate sensors are required as specified in 4.1.1.2, the displays shall be clearly marked to identify the runway and section of runway monitored by each sensor.</p> <p>4.1.2.2 Recommendation.— <i>The mean values of, and significant variations in, the surface wind direction and speed for each sensor should be derived and displayed by automated equipment.</i></p>
	(ii) barometric pressure;		To be dealt with separately	A11 7.1.4.2 Aerodrome control towers shall be provided with current pressure data for setting altimeters for the aerodrome concerned.
	(iii) temperature.		To be dealt with separately	<p>A:11: 7.1.4.1 Aerodrome control towers shall be supplied with meteorological information as described in Annex 3, Appendix 9, 1.1 for the aerodrome with which they are concerned. Special reports and amendments to forecasts shall be communicated to the aerodrome control towers as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast.</p> <p>A3, Appendix 9: The following meteorological information shall be supplied, as necessary, to an aerodrome control tower by its associated aerodrome meteorological office:</p> <p>a) local routine reports, local special reports, METAR, SPECI, TAF, trend forecasts and amendments thereto, for the aerodrome concerned;</p> <p>b) SIGMET and AIRMET information, wind shear warnings and alerts and aerodrome warnings;</p> <p>a3: 4.5.1 Local routine reports, local special reports, METAR and SPECI shall contain the following elements in the order indicated: ... j) air temperature and dew-point temperature;</p>
	(c) operational data displays for: (i) other significant weather information;		To be dealt with separately	<p>7.1.4.1 Aerodrome control towers shall be supplied with meteorological information as described in Annex 3, Appendix 9, 1.1 for the aerodrome with which they are concerned. Special reports and amendments to forecasts shall be communicated to the aerodrome control towers as soon as they are necessary in accordance with established criteria, without waiting for the next routine report or forecast.</p> <p>7.1.4.4 Aerodrome control towers at aerodromes where runway visual range values are measured by</p>

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
				<p>instrumental means shall be equipped with display(s) permitting read-out of the current runway visual range value(s). The display(s) shall be related to the same location(s) of observation and be fed from the same sensor(s) as the corresponding display(s) in the meteorological station, where such a station exists.</p> <p>7.1.4.6 Aerodrome control towers shall be supplied with information on wind shear which could adversely affect aircraft on the approach or take-off paths or during circling approach and aircraft on the runway during the landing roll or take-off run.</p>
	(ii) NOTAMS;		To be dealt with separately	<p>PATM 7.5.3 Essential information on aerodrome conditions shall be given to every aircraft, except when it is known that the aircraft already has received all or part of the information from other sources. The information shall be given in sufficient time for the aircraft to make proper use of it, and the hazards shall be identified as distinctly as possible.</p> <p>Note.— “Other sources” include NOTAM, ATIS broadcasts, and the display of suitable signals.</p>
	(iii) handover/takeover;		To be dealt with separately	<p>4.13.2 Information and data to be presented</p> <p>4.13.2.1 Sufficient information and data shall be presented in such a manner as to enable the controller to have a complete representation of the current air traffic situation within the controller’s area of responsibility and, when relevant, movements on the manoeuvring area of aerodromes. The presentation shall be updated in accordance with the progress of aircraft, in order to facilitate the timely detection and resolution of conflicts as well as to facilitate and provide a record of coordination with adjacent ATS units and control sectors.</p> <p>4.13.2.2 An appropriate representation of the airspace configuration, including significant points and information related to such points, shall be provided. Data to be presented shall include relevant information from flight plans and position reports as well as clearance and coordination data. The information display may be generated and updated automatically, or the data may be entered and updated by authorized personnel.</p> <p>4.13.2.3 Requirements regarding other information to be displayed, or to be available for display, shall be specified by the appropriate authority.</p>
	(iv) essential aerodrome information;		To be dealt with separately	<p>PATM 7.5.3 Essential information on aerodrome conditions shall be given to every aircraft, except when it is known that the aircraft already has received all or part of the information from other sources. The information shall be given in sufficient time for the aircraft to make proper use of it, and the hazards shall be identified as distinctly as possible.</p>

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
				Note.— “Other sources” include NOTAM, ATIS broadcasts, and the display of suitable signals.
	(v) relevant maps and charts;		To be dealt with separately	<p>4.13.2 Information and data to be presented</p> <p>4.13.2.1 Sufficient information and data shall be presented in such a manner as to enable the controller to have a complete representation of the current air traffic situation within the controller’s area of responsibility and, when relevant, movements on the manoeuvring area of aerodromes. The presentation shall be updated in accordance with the progress of aircraft, in order to facilitate the timely detection and resolution of conflicts as well as to facilitate and provide a record of coordination with adjacent ATS units and control sectors.</p> <p>4.13.2.2 An appropriate representation of the airspace configuration, including significant points and information related to such points, shall be provided. Data to be presented shall include relevant information from flight plans and position reports as well as clearance and coordination data. The information display may be generated and updated automatically, or the data may be entered and updated by authorized personnel.</p> <p>4.13.2.3 Requirements regarding other information to be displayed, or to be available for display, shall be specified by the appropriate authority.</p>
	d) a time display at each operational position.		To be dealt with separately	2.26.5 Aerodrome control towers shall, prior to an aircraft taxiing for take-off, provide the pilot with the correct time, unless arrangements have been made for the pilot to obtain it from other sources. Air traffic services units shall, in addition, provide aircraft with the correct time on request. Time checks shall be given to the nearest half minute.
3.1.2.5	<p>Switching, monitors and controls for aerodrome equipment. A control tower must have appropriate switching, monitors, and controls for aerodrome lighting equipment for which the control tower has responsibility, including:</p> <ul style="list-style-type: none"> (a) runway lighting; (b) approach lighting; (c) high intensity approach and runway lighting; (d) taxiway lighting; (e) VASIS; (f) obstruction lighting; (g) illuminated wind indicator; and (h) aerodrome beacon. 		To be dealt with separately	<p>A11 7.3.1 ATS units shall be kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and those radio navigation services and visual aids essential for surface movement.</p> <p>Part 139 Manual of Standards:</p> <p>9.12 (3) At an aerodrome with an ATS provider, each of the following lighting systems, if provided, must be equipped with an intensity control so that the ATS provider can select light output to suit ambient conditions and avoid dazzling pilots:</p> <ul style="list-style-type: none"> (a) approach lighting system; (b) visual approach slope indicator system (VASIS); (c) runway edge, threshold and end lights; (d) runway centreline lights;

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
				(e) runway touchdown zone lights; (f) taxiway lights; (g) stop bars and no entry bars; (h) apron centreline and apron edge lights.
3.1.2.6	A control tower must have a means to readily recognise the failure of any terrestrial navigation aid being used for the control of aircraft.		To be dealt with separately	A11 7.3.1 ATS units shall be kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and those radio navigation services and visual aids essential for surface movement.
3.1.2.7	A control tower must have a means of ensuring that the ILS Glide Path is not radiating if the associated Localiser is not operating.		To be dealt with separately	A11 7.3.1 ATS units shall be kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and those radio navigation services and visual aids essential for surface movement.
3.1.3.1	<p>3.1.3 Area and Approach Control Units</p> <p>Area and Approach Control Units must incorporate the following facilities:</p> <ul style="list-style-type: none"> (a) air/ground RTF and/or datalink communications equipment on assigned frequencies, in accordance with ICAO Annex 11, Chapter 6; (b) ground/ground voice and/or datalink equipment to enable communication between adjacent air traffic service units including control towers and the parent area control centre or approach control unit, in accordance with ICAO Annex 11, Chapter 6; (c) time display at each operational position; (d) flight data display; (e) operational data display; (f) appropriate maps and charts; (g) external communications; (h) a means to readily recognise the failure of any terrestrial navigation aid used in providing separation to aircraft; (i) voice and, where applicable, data recording equipment; (j) AFTN terminal or other means to provide information normally conveyed by AFTN. 		To be dealt with separately	<p>Annex 11</p> <p>6.1.3.1 Air-ground communication facilities shall enable two-way communications to take place between a unit providing area control service and appropriately equipped aircraft flying anywhere within the control area(s).</p> <p>6.1.3.2 Recommendation.— <i>Whenever practicable, air-ground communication facilities for area control service should permit direct, rapid, continuous and static-free two-way communications.</i></p> <p>6.1.4.1 Air-ground communication facilities shall enable direct, rapid, continuous and static-free two-way communications to take place between the unit providing approach control service and appropriately equipped aircraft under its control.</p> <p>6.1.4.2 Where the unit providing approach control service functions as a separate unit, air-ground communications shall be conducted over communication channels provided for its exclusive use.</p> <p>6.2.2.1.2 An area control centre, in addition to being connected to the flight information centre as prescribed in 6.2.2.1.1, shall have facilities for communications with the following units providing a service within its area of responsibility:</p> <ul style="list-style-type: none"> a) approach control units; b) aerodrome control towers; c) air traffic services reporting offices, when separately established. <p>6.2.2.1.3 An approach control unit, in addition to being connected to the flight information centre and the area</p>

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
				<p>control centre as prescribed in 6.2.2.1.1 and 6.2.2.1.2, shall have facilities for communications with the associated aerodrome control tower(s) and, when separately established, the associated air traffic services reporting office(s).</p> <p>ICAO Doc 4444</p> <p>4.13.2 Information and data to be presented</p> <p>4.13.2.1 Sufficient information and data shall be presented in such a manner as to enable the controller to have a complete representation of the current air traffic situation within the controller's area of responsibility and, when relevant, movements on the manoeuvring area of aerodromes. The presentation shall be updated in accordance with the progress of aircraft, in order to facilitate the timely detection and resolution of conflicts as well as to facilitate and provide a record of coordination with adjacent ATS units and control sectors.</p> <p>4.13.2.2 An appropriate representation of the airspace configuration, including significant points and information related to such points, shall be provided. Data to be presented shall include relevant information from flight plans and position reports as well as clearance and coordination data. The information display may be generated and updated automatically, or the data may be entered and updated by authorized personnel.</p> <p>4.13.2.3 Requirements regarding other information to be displayed, or to be available for display, shall be specified by the appropriate authority.</p> <p>4.13.3 Presentation of information and data</p> <p>4.13.3.1 The required flight plan and control data may be presented through the use of paper flight progress strips or electronic flight progress strips, by other electronic presentation forms or by a combination of presentation methods.</p> <p>4.13.3.2 The method(s) of presenting information and data shall be in accordance with Human Factors principles. All data, including data related to individual aircraft, shall be presented in a manner minimizing the potential for misinterpretation or misunderstanding.</p> <p>4.13.3.3 Means and methods for manually entering data in ATC automation systems shall be in accordance with Human Factors principles.</p> <p>4.13.3.4 When flight progress strips (FPS) are used, there should be at least one individual FPS for each flight. The number of FPS for individual flights shall be sufficient to meet the requirements of the ATS unit concerned. Procedures for annotating data and provisions specifying the types of data to be entered on FPS, including the use of symbols, shall be</p>

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
				<p>specified by the appropriate ATS authority.</p> <p><i>Note.— Guidance material on the use of paper FPS is contained in the Air Traffic Services Planning Manual (Doc 9426).</i></p> <p>4.13.3.5 Data generated automatically shall be presented to the controller in a timely manner. The presentation of information and data for individual flights shall continue until such time as the data is no longer required for the purpose of providing control, including conflict detection and the coordination of flights, or until terminated by the controller.</p>
3.1.3.2	Area control centres and approach control units must have a means to readily recognise the failure of any terrestrial navigation aid being used for the control of aircraft.		To be dealt with separately	7.3.1 ATS units shall be kept currently informed of the operational status of radio navigation services and visual aids essential for take-off, departure, approach and landing procedures within their area of responsibility and those radio navigation services and visual aids essential for surface movement.
3.1.4.1	<p>3.1.4 Commissioning of New Facilities and Equipment</p> <p>Any new facilities must be commissioned in accordance with procedures stated in the provider's Operations Manual.</p>		To be dealt with separately	<p>2.5.1 General requirements</p> <p>2.6.1.1 A safety assessment shall be carried out in respect of proposals for significant airspace reorganizations, for significant changes in the provision of ATS procedures applicable to an airspace or an aerodrome, and for the introduction of new equipment, systems or facilities, such as:</p> <p>b) a new operating procedure, including departure and arrival procedures, to be applied within an airspace or at an aerodrome;</p> <p>c) a reorganization of the ATS route structure;</p> <p>d) a resectorization of an airspace;</p> <p>e) physical changes to the layout of runways and/or taxiways at an aerodrome; and</p> <p>f) implementation of new communications, surveillance or other safety-significant systems and equipment, including those providing new functionality and/or capabilities.</p>
3.1.4.2	<p>The procedures must describe how the provider has determined that:</p> <p>(a) the functional and performance requirements for the facility have been met; and</p> <p>(b) all ATS operating procedures have been validated; and</p> <p>(c) sufficient trained ATS personnel are available to operate the facility; and</p> <p>(d) all support arrangements for the facilities, including any necessary agreements, are in place.</p>		To be dealt with separately	<p>2.5.2 Scope</p> <p>2.6.1.1 A safety assessment shall be carried out in respect of proposals for significant airspace reorganizations, for significant changes in the provision of ATS procedures applicable to an airspace or an aerodrome, and for the introduction of new equipment, systems or facilities, such as:</p> <p>b) a new operating procedure, including departure and arrival procedures, to be applied within an airspace or at an aerodrome;</p> <p>c) a reorganization of the ATS route structure;</p> <p>d) a resectorization of an airspace;</p>

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
				<p>e) physical changes to the layout of runways and/or taxiways at an aerodrome; and</p> <p>f) implementation of new communications, surveillance or other safety-significant systems and equipment, including those providing new functionality and/or capabilities.</p>
<p>Section 4.1 - Note</p>	<p>Chapter 4: Personnel Section 4.1 General This chapter is reserved.</p>	<p>2.0305.01</p>	<p>CHAPTER 2 Division 3 Organisation and personnel 2.305 Minimum personnel levels (1) For subsection 172.110 of CASR, the numbers of qualified and trained operational personnel must be enough to ensure uninterrupted provision for each service covered by its approval. (2) In determining that there are enough qualified and trained operational personnel, an ATS provider must account for the following matters: (a) Leave. (b) Breaks. (c) Requirements for training and assessment. (d) Workload complexity. (e) Where the relevant personnel are required to perform additional administration or ancillary duties — those duties. (f) Reasonable allowance for assurance of service provision? 2.310 Supervisory requirements (1) For subsection 172.115 of CASR, the numbers of qualified and trained personnel must be enough to ensure uninterrupted supervision for each location or operating position: (a) Actively monitoring the positions being supervised. (b) Conducting the required administration tasks for the assigned area of supervision. (c) Providing in-flight emergency response (IFER) assistance to controllers as required. (d) Conducting technical system tasks as required by the applicable ATS system. (2) In determining that there are enough qualified and trained supervising personnel, an ATS provider must also account for the following matters: (a) leave, and (b) breaks, and (b) training or assessment, and (c) workload complexity, and (d) where the relevant personnel are also required to perform administration or ancillary duties — those duties. (3) For subsection 172.115 of CASR, the qualification and training for personnel performing supervisor duties must include: (a) knowledge of the ATC endorsements under supervision (b) training in the tactical management of staffing and console allocation for the area under supervision.</p>	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	New	2.0605.01	CHAPTER 2 Division 6 Fatigue management <i>Consultation Note:</i> Please see the separate document dealing with the proposed standards for fatigue management.	
5.1.2.1	Chapter 5: Training and Checking Program Section 5.1 General 5.1.1 Introduction 5.1.1.1 This Chapter sets out the standards for a Training and Checking program. 5.1.2 Standard Program A Training and Checking program must ensure that an individual performing a function in conjunction with any air traffic services is competent to perform that function.	2.0405.01	CHAPTER 2 Division 4 Management 2.405 Training and checking program (1) This section is: (a) made for section 172.140 of CASR; and (b) prescribes requirements for an ATS provider's training and checking program. General matters (2) An ATS provider's training and checking program must ensure that an individual performing a function in conjunction with any air traffic services is competent to perform that function.	
5.1.2.2	Processes which address the integrity of staff training must be defined, documented and maintained.	2.0405.02	(3) An ATS provider's training and checking program must include a quality assurance process to ensure that all training and checking is up-to-date and fit for purpose.	
5.1.3.1	5.1.3 Competency In summary, an individual is competent if that individual is: (a) licensed, where the function can only be performed by the holder of a licence; (b) rated, where the function can only be performed by the holder of an appropriate rating; (c) endorsed, where the function can only be performed by the holder of an appropriate endorsement; (d) qualified, where the function can only be performed by the holder of an appropriate qualification; (e) trained and proven to be proficient in the performance of functions that are not covered by sub-paragraphs (a) to (d) above; and (f) recent in the performance of the function and knowledge and skills in emerging matters identified as essential to task performance. <i>Note Competency standards for licensed functions are contained in CASR Part 65.</i>		No equivalent – duplicates 172-.120 without adding anything	
5.1.4.1	5.1.4 Training Courses The term 'training course' has wide application and includes all training for a particular competency required for the provision of an air traffic service and includes training on new equipment.		No equivalent	
5.1.4.2	Training courses must be provided on the basis of a MOS Part		No equivalent	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	65 requirement, or training needs analysis or similar method.			
5.1.4.3	The training programs for each course must be comprehensive and facilitate achievement of training goals through a syllabus which reflects required competencies. The syllabus must ensure compliance with relevant national and international requirements and CASA competency-based training standards.	2.0405.03	<p>Structure of training courses</p> <p>(4) Training courses provided as part of an ATS provider's training and checking program must:</p> <p>(a) facilitate achievement of training goals through a syllabus which reflects required competencies.; and</p>	
5.1.4.4	Training courses must use a method of delivery consistent with ANTA requirements for an RTO, using facilities and instructors, or training officers, with current expertise and identified qualifications appropriate to achieving the goals of the course.	2.0405.04	<p>(b) use a method of delivery consistent with Australian Skills Quality Authority (ASQA) requirements, and</p> <p>(c) be conducted with the use of facilities and instructors or training officers with current expertise and identified qualifications appropriate to achieving the goals of the course, and</p>	
5.1.4.5	The method of assessment, both theoretical and practical, must utilise qualified assessors and appropriate processes and facilities and must be consistent with CASR Part 65.	2.0405.05	<p>(d) be consistent with CASR Part 65.</p>	
5.1.5.1	5.1.5 Emergency Training Emergency training to specifically prepare a candidate for unforeseen circumstances must form part of all training courses.	2.0405.06	<p>(5) An ATS provider's training and checking program must have a structured program covering the following matters:</p> <p>(a) Emergency training — to specifically prepare staff for unforeseen circumstances.</p>	
5.1.6.1	5.1.6 Refresher Training Refresher training is part of the Training and Checking program. It involves periodic training and assessment of individuals performing functions in air traffic services in those competencies (knowledge and skills) which are essential, but infrequently or rarely used (e.g. abnormal and emergency operations, degraded equipment modes, contingency plan implementation). The content and periodicity of refresher training must be sufficient to ensure competency.	2.0405.07	<p>(b) Refresher training — periodic training and assessment in those competencies (knowledge and skills) which are essential, but infrequently or rarely used (e.g. abnormal and emergency operations, degraded equipment modes, contingency plan implementation).</p>	
5.1.7.1	5.1.7 On-going Training The training and checking program must provide for on-going training, as necessary, to ensure that staff are competent in the use of new or emerging standards, procedures, techniques, facilities and equipment identified as essential to task performance.	2.0405.08	<p>(c) On-going training — to ensure that staff are competent in the use of new or emerging standards, procedures, techniques, facilities and equipment identified as essential to task performance.</p>	
5.1.8.1	5.1.8 Remedial Training The training and checking program must have a process which identifies deficiencies in knowledge or application, and must have a process to ensure these deficiencies are rectified.	2.0405.09	<p>(d) Remedial Training — to identify and thereby rectify any deficiencies in knowledge or application.</p>	
5.1.9.1	5.1.9 Checking The purpose of checking is to ensure that the individual subject to the check meets the competency standards specified in CASR Part 65, and the ATS provider's own standards where these are additional to CASR Part 65. Checks must be carried out as required by CASR Part 65.	2.0405.10	<p>Checking</p> <p>(6) An ATS provider's training and checking program must have a checking system to ensure that relevant staff:</p> <p>(a) meet the competency standards specified in Part 65 of CASR; and</p> <p>(b) meet the ATS provider's own standards where these are additional to Part 65 of CASR; and</p> <p>(c) are checked or assessed at the intervals specified in Part 65 of</p>	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
			CASR.	
5.1.10.1	<p>5.1.10 Qualifications of Trainers and Checkers</p> <p>Persons carrying out training and/or checking functions must be appropriately qualified for the functions as required by CASR Part 65.</p>		No equivalent	
6.1.1.1	<p>Chapter 6 Safety Management System</p> <p>Section 6.1 General</p> <p>6.1.1 Features of Safety Management System</p> <p>A safety management system must have the following elements:</p> <p>(a) the ATS provider's safety policy and objectives;</p>	2.0410.01	<p>2.410 Requirements for safety management system</p> <p>(1) This section is:</p> <p>(a) made for paragraph 172.145(2) of CASR; and</p> <p>(b) prescribes requirements for an ATS provider's safety management system (SMS).</p> <p>Systematic approach etc.</p> <p>(2) The SMS required by 172.145 (1) must:</p> <p>(a) use a systematic approach to managing aviation safety; and</p> <p>(b) set out the organisational structures, key personnel accountabilities, and policies and procedures for the ATS provider's approved functions.</p> <p>Note</p> <p>1. Guidance on the implementation of the framework for an SMS can be found on the CASA website and in the ICAO Safety Management Manual (SMM) (Doc 9859).</p> <p>2. The ATS provider's interfaces with other organisations can make a significant contribution to the safety of its products or services. Guidance on interface management as it relates to SMS is provided in the ICAO SMM.</p>	<p>Annex 19 APPENDIX 2. FRAMEWORK FOR A SAFETY MANAGEMENT SYSTEM (SMS)</p> <p>(See Chapter 4, 4.1.1)</p> <p><i>Note 1.— Guidance on the implementation of the framework for an SMS is contained in the Safety Management Manual (SMM) (Doc 9859).</i></p> <p><i>Note 2.— The service provider's interfaces with other organizations can make a significant contribution to the safety of its products or services. Guidance on interface management as it relates to SMS is provided in the Safety Management Manual (SMM) (Doc 9859).</i></p> <p><i>Note 3.— In the context of this appendix as it relates to service providers, an "accountability" refers to an "obligation" that may not be delegated, and "responsibilities" refers to functions and activities that may be delegated.</i></p> <p>This appendix specifies the framework for the implementation and maintenance of an SMS. The framework comprises four components and twelve elements as the minimum requirements for SMS implementation:</p>
	(b) the organisational and staff responsibilities for safety matters;	2.0410.02	<p>Safety policy and objectives</p> <p>(3) The SMS must provide for, and include documented details of, the ATS provider's safety policy and objectives, including in relation to:</p> <p>(a) managing the ATS provider's commitment to, and responsibility for, aviation safety; and</p> <p>(b) safety accountabilities and responsibilities; and</p> <p>(c) the appointment of key personnel; and</p> <p>(d) coordination of an emergency response plan; and</p> <p>(e) SMS documentation.</p>	<p>1. Safety policy and objectives</p> <p>1.1 Management commitment</p> <p>1.2 Safety accountability and responsibilities</p> <p>1.3 Appointment of key safety personnel</p> <p>1.4 Coordination of emergency response planning</p> <p>1.5 SMS documentation</p>
	(c) the establishment of the levels of safety that apply to the services, and the monitoring of the levels of safety achieved;		Covered by (4) (a)	
	(d) the process for internal safety reviews;	2.0410.04	<p>Safety assurance system</p> <p>(4) The SMS must provide for, and include documented details of, the ATS provider's safety assurance system, including:</p> <p>(a) safety performance monitoring and measurement; and</p> <p>(b) internal safety investigation;</p> <p>(c) change management; and</p> <p>(d) continuous improvement of the SMS.</p>	<p>3. Safety assurance</p> <p>3.1 Safety performance monitoring and measurement</p> <p>3.2 The management of change</p> <p>3.3 Continuous improvement of the SMS</p>

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	(e) the process for the internal reporting and management of safety concerns and incidents;		Covered by (4) (b)	
	(f) the process for the identification, assessment, control and mitigation of existing and potential safety hazards in service provision;	2.0410.03	Safety risk management (5) The SMS must provide for, and include documented details of, the ATS provider's safety risk management process, including its: (a) hazard identification processes; and (b) risk assessment and mitigation processes.	2. Safety risk management 2.1 Hazard identification 2.2 Safety risk assessment and mitigation
	(g) the definition of the interface arrangements, for safety management and related responsibilities and procedures, with internal functional groups and with aerodrome operators and support service providers;		No equivalent element proposed as this is not required in Annex 19. However see the proposed note from Annex 19 stating: 2. The ATS provider's interfaces with other organisations can make a significant contribution to the safety of its products or services. Guidance on interface management as it relates to SMS is provided in the ICAO SMM.	
	(h) the processes for the management of changes to existing services. <i>Guidelines for the preparation of a safety management system are published by CASA in Advisory Circular AC 172-1.</i>		Covered by (4) (c)	
		2.0410.05	Safety promotion (6) The SMS must provide for, and include documented details of, the ATS provider's safety training and promotion system dealing with: (a) training and education; and (b) safety communication.	4. Safety promotion 4.1 Training and education 4.2 Safety communication
		2.0410.06	Fatigue management (7) An ATS provider's FRMS must be integrated with the SMS.	A11 2.28.4 Where an air traffic services provider implements an FRMS to manage fatigue-related safety risks in the provision of part or all of its air traffic control services in accordance with 2.28.2 b), the State shall: a) require the air traffic services provider to have processes to integrate FRMS functions with its other safety management functions; and b) approve an FRMS, according to a documented process, that provides a level of safety acceptable to the State. <i>Note.— Provisions on the protection of safety information, which support the continued availability of information required by an FRMS, are contained in Annex 19.</i>
6.1.2.1	6.1.2 Safety Case Preparation A safety case must be based on a recognised methodology for safety risk assessment.		No equivalent	
6.1.2.2	The safety risk assessment in a safety case must: (a) identify all potential safety hazards associated with the operation of each service, in normal and abnormal modes of operation; and		No equivalent	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	<p>(b) assess the safety risk of each hazard; and</p> <p>(c) identify the means of mitigation of unacceptable safety risks.</p> <p><i>Note: Guidelines for the preparation of safety cases are published by CASA in Advisory Circular AC 172-2.</i></p>			
6.1.2.3	<p>An existing air traffic service or facility that has a demonstrated history of safe operation for at least 2 years before the date of initial certification does not need to be covered by a baseline safety case.</p>		No equivalent	
6.1.2.4	<p>A safety case must be prepared to support a new service or a proposed change to an existing service:</p> <p>(a) the effect of which would be that the service would no longer be in accordance with the certificate issued to the ATS provider under regulation 172.275 of CASR; or</p> <p>(b) that requires prior notification to CASA because of a requirement to do so in the ATS provider's safety management system.</p> <p><i>Note An internal safety assessment for a change that does not constitute a variation to a service provider's approval is undertaken in accordance with a service provider's safety management system.</i></p>	2.0410.07	<p>Changes requiring submission of a safety assessment</p> <p>(8) A safety assessment must be provided to CASA under an ATS provider's SMS for any new service or proposed change to an existing service:</p> <p>(a) the effect of which would be that the service would no longer be in accordance with the certificate issued to the ATS provider under regulation 172.260 of CASR; or</p> <p>(b) that requires prior notification to CASA because of a requirement to do so in the ATS provider's SMS.</p> <p><i>Note An internal safety assessment for a change that does not constitute a variation to a service provider's approval would be undertaken in accordance with an ATS service provider's SMS.</i></p>	
7.1.1.1	<p>Chapter 7: Contingency Plans</p> <p>Section 7.1 General</p> <p>7.1.1 Introduction</p> <p>This Chapter sets out the standards for contingency plans in the provision of air traffic services.</p>			
7.1.1.2	<p>A contingency plan must describe in detail the actions that operational staff are to follow to maintain safety in the event of the failure or non-availability of staff, facilities or equipment which affects the provision of air traffic services. The plan must also cover procedures for the safe and orderly transition back to full service provision.</p>	2.0415.01	<p>2.415 Contingency plan</p> <p>(1) This section is:</p> <p>(a) made for subsection 172.150 (1) of CASR; and</p> <p>(b) prescribes requirements for an ATS provider's contingency plan.</p>	
7.1.2.1	<p>7.1.2 Minimum Contents</p> <p>A contingency plan must include to the extent of the particular services authorised on the provider's certificate, but is not limited to, arrangements for the following:</p> <p>(a) airspace management:</p> <p>(i) transfer of responsibility;</p> <p>(ii) redesignation;</p> <p>(iii) emergency traffic;</p> <p>(b) air traffic flow management;</p> <p>(c) air traffic separation;</p> <p>(d) alternatives for the continuing provision of the services</p>	2.0415.02	<p>General matters</p> <p>(2) An ATS provider's contingency plan must include to the extent of the particular services authorised on the provider's certificate, but is not limited to, arrangements for the following:</p> <p>(a) airspace management:</p> <p>(i) transfer of responsibility;</p> <p>(ii) redesignation;</p> <p>(iii) emergency traffic;</p> <p>(b) air traffic flow management;</p> <p>(c) air traffic separation;</p> <p>(d) alternatives for the continuing provision of the services</p> <p><i>Note For example: alternative operating positions or ATS units.</i></p> <p>(e) alternative services;</p>	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	<p>(e.g. alternative operating positions or ATS units);</p> <p>(e) alternative services (e.g. traffic information);</p> <p>(f) SAR alerting;</p> <p>(g) information transfer/coordination;</p> <p>(h) notifications to affected parties;</p> <p>(i) letters of agreement with other providers on any of the above matters;</p> <p>(j) restoration of staff, facility or equipment to normal levels;</p> <p>(k) measures to test the suitability of the plan;</p> <p>(l) staff training requirements to ensure the plan can be safely implemented.</p>		<p><i>Note</i> For example: provision of traffic information instead of air traffic control service.</p> <p>(f) alerting service;</p> <p>(g) information transfer or coordination;</p> <p>(h) notifications to affected parties;</p> <p>(i) letters of agreement with other providers on any of the above matters;</p> <p>(j) restoration of staff, facility or equipment to normal levels;</p> <p>(k) measures to test the suitability of the plan;</p> <p>(l) staff training requirements to ensure the plan can be safely implemented.</p> <p>(m) procedures covering the contingency matters described in ICAO Doc. 4444</p>	
		2.0415.03	<p>Reporting about activation of contingency plan</p> <p>(3) Activation of an ATS provider's contingency plan is a change of circumstances for the purposes of subsection 172.185 of CASR. Notification to CASA must include:</p> <p>(a) The date, time and duration of the activation.</p> <p>(b) The reason for the activation.</p> <p>(c) Steps put in place to prevent recurrence.</p>	
8.1.1.1	<p>Chapter 8: Security Program</p> <p>Section 8.1 General</p> <p>8.1.1 Introduction</p> <p>This Chapter sets out the standards for a security program.</p>	2.0420.01	<p>2.420 Security program</p> <p>(1) This section is:</p> <p>(a) made for subsection 172.155 (2) of CASR; and</p> <p>(b) prescribes requirements for an ATS provider's security program.</p>	
8.1.2.1	<p>8.1.2 Security Measures</p> <p>A security program must specify the physical security measures, and the procedures to be followed for the purpose of:</p> <p>(a) preventing and detecting intentional and unintentional damage to any personnel, facility or equipment used by the provider in providing an air traffic service;</p> <p>(b) responding to a threat of intentional and unintentional damage to a facility or equipment used by the provider in providing an air traffic service; and</p> <p>(c) preventing unauthorised people from having access to any facility or equipment used by the provider in providing an air traffic service.</p>	2.0420.02	<p>General matters</p> <p>(2) An ATS provider's security program must specify the physical security measures, and the procedures to be followed for the purpose of:</p> <p>(a) preventing and detecting intentional and unintentional damage to any personnel, facility or equipment used by the provider in providing an air traffic service;</p> <p>(b) responding to a threat of intentional and unintentional damage to a facility or equipment used by the provider in providing an air traffic service; and</p> <p>(c) preventing unauthorised people from having access to any facility or equipment used by the provider in providing an air traffic service.</p>	
9.1.1.1	<p>Chapter 9: Documents and Records</p> <p>Section 9.1 General</p> <p>9.1.1 Documents</p> <p>A document control system covers the authorisation, standardisation, publication, distribution and amendment of all documentation issued by the organisation, or required by the</p>	2.0505.01	<p>CHAPTER 2</p> <p>Division 5 Reference materials, documents, records and logbooks</p> <p>2.505 Reference materials, documents etc</p> <p>(1) This section:</p> <p>(a) is made for paragraph 172.160 (1) (g), and subsections 172.165 (1) and (2), 172.170 (2) and 172.175 (1) and (2) of CASR; and</p>	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	organisation for the provision of air traffic services.		<ul style="list-style-type: none"> (b) prescribes the kinds of documents and records that an ATS provider must keep and how long these documents or records; and (c) prescribes the length of time that an ATS provider must retain a document or record; and (d) prescribes the system that an ATS provider must have in place for controlling the documents and records relating to the air traffic services that it provides; and (e) prescribes the standards and information requirements for logbooks. <p>(2) Any reference material, document, record or logbook, or equivalent, required or mentioned in this section may:</p> <ul style="list-style-type: none"> (a) be paper-based or electronic form, and (b) involve the use of multiple separate sources for a particular purpose. 	
9.1.1.2	<p>These processes must ensure:</p> <ul style="list-style-type: none"> (a) authorisation is by a designated authority appropriate to the management and safety accountability structures; (b) currency can be readily determined; (c) availability at locations where needed by ATS personnel; (d) only current versions are available; (e) a master copy is securely held; (f) archival where superseded. 	2.0520.01	<p>2.520 Document and record control system</p> <p>(1) An ATS provider's document and record control system must include:</p> <ul style="list-style-type: none"> (a) a process for documents to be authorised by a designated authority appropriate to the management and safety accountability structures; (b) a system that ensures the currency of documents and records can be readily determined; (c) a system for ensuring documents are readily available at locations where needed by ATS personnel; (d) a system for ensuring only current versions are available; (e) a system that ensures documents and records are protected from tampering and unauthorised destruction; (f) a process that ensures superseded documents and records are retained in accordance with the relevant requirements of subsection 2.515 (1); (g) where requisitioned by an appropriate authority for the purposes of an investigation, a system to isolate and secure relevant records until their release by that authority. 	
9.1.1.3	<p>Reference Materials. For the purposes of sub-regulation 172.160(g), the manuals and documents to be maintained are the following:</p> <ul style="list-style-type: none"> (a) manuals for equipment used by staff in the provision of air traffic services; (b) the relevant sections of the Aerodrome Emergency Plan (aerodrome services only). 	2.0510	<p>2.510 Reference materials</p> <p>An ATS provider must maintain the following reference materials:</p> <ul style="list-style-type: none"> (a) the civil aviation legislation relevant to the provision of its air traffic service; (b) Annexes 11 and Volume II of Annex 10; (c) ICAO Doc. 4444; (d) if a regional supplementary procedure set out in ICAO Doc. 7030 relates to an air traffic service that the provider provides—ICAO Doc. 7030; (e) the parts of the AIP that are relevant to any air traffic services that it provides; (f) the Part 172 Manual of Standards; (g) all manuals and documents specified in the Part 172 Manual of Standards; (h) any instructions issued by the provider to its personnel in relation 	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc																		
			to the provision of its air traffic services. (i) manuals for equipment used by personnel in the provision of its air traffic services; and (j) for units providing aerodrome control services — the relevant sections of the Aerodrome Emergency Plan.																			
9.1.2.1	9.1.2 Records A system for records covers identification, collection, indexing, storage, security, maintenance, access and disposal of records necessary for the provision of air traffic services.	2.0515	2.515 Documents and records (1) Subject to any additional or longer duration retention requirements required by the <i>Archives Act 1983</i> , an ATS provider must keep a document or record specified in column 1 of Table 2.510-1 below and retain that document or record for at least the period specified in column 2 of the table corresponding with the particular document or record. Table 2.510-1 Document and record keeping and retention requirements <table border="1" data-bbox="1380 785 2128 1915"> <thead> <tr> <th data-bbox="1380 785 1911 898">Type of document or record Column 1</th> <th data-bbox="1911 785 2128 898">Retention requirement Column 2</th> </tr> </thead> <tbody> <tr> <td data-bbox="1380 898 1911 972">Direct pilot-controller two-way radiotelephony or datalink communications.</td> <td data-bbox="1911 898 2128 1423" rowspan="5">30 days</td> </tr> <tr> <td data-bbox="1380 972 1911 1045">Direct-speech or data link between air traffic services units.</td> </tr> <tr> <td data-bbox="1380 1045 1911 1098">Surveillance data.</td> </tr> <tr> <td data-bbox="1380 1098 1911 1192">Automated flight data processing including on-screen display of aircraft tracks and label blocks.</td> </tr> <tr> <td data-bbox="1380 1192 1911 1287">ATS messages, including flight notifications or flight plans and automated weather broadcasts</td> </tr> <tr> <td data-bbox="1380 1287 1911 1423">Flight progress strips or records of a similar nature used for the recording of flight data and the issue of clearances, instructions and directions</td> <td data-bbox="1911 1423 2128 1822" rowspan="4">7 years</td> </tr> <tr> <td data-bbox="1380 1423 1911 1476">Logbooks</td> </tr> <tr> <td data-bbox="1380 1476 1911 1549">Details of interruptions to the normal operation of services or facilities</td> </tr> <tr> <td data-bbox="1380 1549 1911 1623">Staff duty rosters</td> </tr> <tr> <td data-bbox="1380 1623 1911 1696">Directions, instructions and technical manuals issued to staff for the provision of air traffic services</td> <td data-bbox="1911 1696 2128 1822" rowspan="2">7 years</td> </tr> <tr> <td data-bbox="1380 1696 1911 1822">Records of ATS personnel training, licensing and competency certification, even after an employee ceases to be employed by the ATS provider.</td> </tr> <tr> <td data-bbox="1380 1822 1911 1915">Details of actions carried out under the Safety Management System including follow-up corrective and preventative actions</td> <td data-bbox="1911 1822 2128 1915">10 years</td> </tr> </tbody> </table>	Type of document or record Column 1	Retention requirement Column 2	Direct pilot-controller two-way radiotelephony or datalink communications.	30 days	Direct-speech or data link between air traffic services units.	Surveillance data.	Automated flight data processing including on-screen display of aircraft tracks and label blocks.	ATS messages, including flight notifications or flight plans and automated weather broadcasts	Flight progress strips or records of a similar nature used for the recording of flight data and the issue of clearances, instructions and directions	7 years	Logbooks	Details of interruptions to the normal operation of services or facilities	Staff duty rosters	Directions, instructions and technical manuals issued to staff for the provision of air traffic services	7 years	Records of ATS personnel training, licensing and competency certification, even after an employee ceases to be employed by the ATS provider.	Details of actions carried out under the Safety Management System including follow-up corrective and preventative actions	10 years	
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			(2) An ATS provider must ensure that automatic recordings have a means for accurately establishing the time, in hours/minutes/seconds, at which any recorded event occurred.	
9.1.2.2	Records systems must provide an accurate chronicle of ATS activities for the purpose of reconstruction of events for air safety investigation, and for system safety analysis.			
9.1.3.1	<p>9.1.3 Records to be Kept</p> <p>Automatic recordings. The following items used for the provision of air traffic services must be recorded automatically and retained for the period shown:</p> <p>(a) direct pilot-controller two-way radiotelephony or datalink communications—30 days;</p> <p>(b) direct-speech or data link between air traffic services units—30 days;</p> <p>(c) surveillance data from primary and secondary radar equipment or obtained through ADS—14 days;</p> <p>(d) automated flight data processing including on-screen display of aircraft tracks and label blocks—14 days (consistency with sub-paragraph (c) above).</p> <p><i>Note Where possible, provision of synchronous integration of radar and on-screen data with related voice recordings should be facilitated. (ICAO Air Traffic Services Planning Manual, Chapter 8.4).</i></p>		Covered by 2.515	
9.1.3.2	Time injection. Automatic recordings must have a means of establishing accurately the time, in hours/minutes/seconds, at which any recorded event occurred.		Covered by 2.515 (2)	
9.1.3.3	<p>Document records. The following items must be kept for a minimum of 30 days (ICAO Air Traffic Services Planning Manual):</p> <p>(a) ATS messages, including flight plans;</p> <p>(b) flight progress strips or documents of a similar nature used for the recording of flight data and the issue of clearances, instructions and directions;</p> <p>(c) transcripts of automated weather broadcasts (e.g. ATIS);</p> <p>(d) log books;</p> <p>(e) handover/takeover details, including, if not electronically recorded, the identification of the person taking over.</p>		Covered by 2.515	
9.1.3.4	<p>Additional items. Records of the following additional items must be kept for a minimum of 5 years:</p> <p>(a) details of interruptions to services;</p> <p>(b) details of failures of equipment used for the provision</p>		Covered by 2.515	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
	of air traffic services; (c) details of facility unavailability; (d) staff duty rosters; (e) details of actions carried out under the Safety Management System including follow-up corrective and preventative actions; (f) directions and instructions issued to staff for the provision of air traffic services; (g) technical manuals used for the provision of air traffic services.			
9.1.3.5	Personnel Licensing Records. Records of ATS personnel licensing and competency certification under CASR Part 65 must be kept for a minimum of 7 years, including after an employee ceases to be employed by the ATS provider. This includes details of: (a) training; (b) renewal and currency of ratings, endorsements and qualifications; and (c) other proficiencies required by the ATS provider to be demonstrated.		Covered by 2.515	
9.1.3.6	Record retention for investigation. Where requisitioned, by an appropriate authority, for the purposes of investigation, records must be isolated and kept in a secure place until their release by that authority.			
9.1.4.1	9.1.4 Maintaining Records Records must not be completed in anticipation of the recorded action being completed.	2.0520.02	(2) An ATS provider's document and record control system must include processes ensuring the following: (a) An accurate chronicle is maintained of ATS activities for the purpose of reconstruction of events for air safety investigation, and for system safety analysis. (b) Records are not completed in anticipation of the recorded action being completed. (c) Deletions from records are prevented.	
9.1.4.2	Deletions from communications records are not permitted. All entries must be written in non-erasable ink, and must be legible.	2.0520.03		
9.1.4.3	Non-active forms or strips on which an error is noted may be replaced. Active forms or strips, fault reports, records and Log Books must be changed, or errors corrected by: (a) drawing a line through the incorrect data and writing the correct data adjacent thereto; or (b) cancelling the old and rewriting the record, retaining both the old and the new for later reference purposes.		Covered by 2.520 (2)	
9.1.4.4	Methods of recording. Information transmitted or received by verbal means must be recorded by electronic means in accordance with CASR Part 172. Voice records must be		No equivalent. With modern voice recording equipment, there is no justifiable need to supplement a voice record with a written record.	

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	supported by one or more of the following methods: (a) writing on a flight progress strip; (b) typewritten on authorised forms; (c) teletyped on page copy machine units; (d) handwritten in accordance with local requirements; (e) handwritten on appropriate forms; (f) entered directly into computer-based equipment.													
9.1.4.5	Flight notifications. A copy of all flight notifications received must be held for 90 days. Printed flight notifications shall be filed with the day's traffic. Electronic records shall be archived via a suitable "off-line" media such as tape, disk array or optical disk.		Covered by 2.515											
9.1.5.1	9.1.5 Maintaining Operational Log Books The Log Book must be used to record all significant occurrences and actions relating to operations, facilities, equipment and staff at an ATS unit. <i>Note Except when forms such as fault reports or Air Safety Incident Reports (ASIRs) must also be completed, duplication of information should be avoided.</i>	2.0525.01	2.525 Record of significant occurrences and actions (1) For subsection 172.165 (1), an ATS provider must record all significant occurrences and actions relating to operations, facilities, equipment and staff at an ATS unit.											
9.1.5.2	A working record or Log Book entry must not be inserted between earlier entries. In the event of an out of sequence entry being necessary, it must be entered as soon as possible, and annotated that it is out of sequence with an explanatory note as to why it is out of sequence.		No equivalent											
9.1.5.3	All Log Book entries must be recorded against the times of the occurrence, or time of the Log Book entry.		Covered by 2.525											
9.1.5.4	Minimum information to be recorded. The minimum information to be recorded is shown in the following table.		Covered by 2.525 (2)											
9.1.5.4 - Table	<table border="0"> <tr> <td>Occasion</td> </tr> <tr> <td>Information</td> </tr> <tr> <td>At the commencement of each day's operation</td> </tr> <tr> <td>· UTC date and time;</td> </tr> <tr> <td>· Where required, identification of the unit and/or the operating position.</td> </tr> <tr> <td>Note: these may be incorporated in the station date stamp.</td> </tr> <tr> <td>On assuming responsibility for a position</td> </tr> <tr> <td>· The UTC date and time of assuming responsibility for a position and the signature of the officer commencing duty (see also voice recordings);</td> </tr> <tr> <td>· Results of equipment checks;</td> </tr> <tr> <td>· Result of time check.</td> </tr> </table>	Occasion	Information	At the commencement of each day's operation	· UTC date and time;	· Where required, identification of the unit and/or the operating position.	Note: these may be incorporated in the station date stamp.	On assuming responsibility for a position	· The UTC date and time of assuming responsibility for a position and the signature of the officer commencing duty (see also voice recordings);	· Results of equipment checks;	· Result of time check.	2.0525.02	(2) For clause (1), the following is the minimum information to be recorded: (a) The date and time of opening and closing of a unit. (b) The date and time of opening and closing an operating position (c) During operation of a unit or operating position: (i) incidents, including accidents, alerting action, and breaches of operating standards (ii) Changes to essential aerodrome information not notified by NOTAM; (iii) Change in status of facilities, service or procedure not notified by NOTAM; (iv) Short term changes in staffing or hours of coverage, including variations to required staffing levels; (d) Except where a separate form or electronic means is provided, a summary of any handover/takeover including: (i) Outstanding action and unusual operations which are current or anticipated;	Annex 11 2.26 Time in air traffic services 2.26.1 Air traffic services units shall use Coordinated Universal Time (UTC) and shall express the time in hours and minutes and, when required, seconds of the 24-hour day beginning at midnight.
Occasion														
Information														
At the commencement of each day's operation														
· UTC date and time;														
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	<p>During operation of the unit</p> <ul style="list-style-type: none"> · Air Safety Incidents, including accidents and breaches of the Regulations such as non-compliance with ATC instructions; <p>Note: This is in addition to the completion of incident reporting actions.</p> <ul style="list-style-type: none"> · Actions taken in relation to any SAR activity including distress communications; · General notes concerning essential aerodrome information, such as the results of aerodrome inspections, closure of sections of the manoeuvring area caused by works or natural phenomena, etc.; · Times of aerodrome closure and reopening, with reasons for the closure; · Change in status of facilities, service or procedure including communication difficulties and tests; · Short term changes in staffing or hours of coverage, including variations to required staffing levels; · Any dispensation given against the Regulations · Status of navigation aids. <p>Handover/takeover (where a separate form is not provided and kept as a record)</p> <ul style="list-style-type: none"> · A resume of outstanding action and unusual operations which are current or anticipated, relating to the traffic display and/or SAR activity; · The status of communications and equipment; · The time of handover/takeover, against the signatures of the officers involved. <p>Closure of unit and/or position</p> <ul style="list-style-type: none"> · Time of closure and conditions and actions relating to the closure, followed by changes to equipment status, and any outstanding action; · The time of intended reopening, and the signature of the officer closing the unit/position. 		<ul style="list-style-type: none"> (ii) The time of handover/takeover. (3) If a logbook is used, all Logbook entries must be recorded against the times of the occurrence, or time of the Logbook entry. (4) An ATS provider must ensure information recordings have a method to uniquely identify the person making an entry. 	
9.1.6.1	<p>9.1.6 Voice and Data Recording</p> <p>Where appropriate voice recording facilities are available, instead of being recorded as entries in a Log Book, the information mentioned in subsection 9.1.6.1A must be voice recorded in sufficient detail to readily establish for any safety investigation:</p> <p>(a) whether and when the position or unit was active or inactive; and</p> <p>(b) the identity of each person responsible for any active position at any time.</p>		No equivalent	

Original MOS ref	Original MOS provision	New MOS order ref	New MOS	ICAO Reference, Comments etc
9.1.6.1A	The information that must be voice recorded is: (a) the identification of incoming staff taking over responsibility for a position; and (b) the information relayed by outgoing staff to incoming staff in accordance with handover and takeover procedures; and (c) for non-continuous units — details of opening and closing watch, including the identification of incoming staff taking over responsibility for the unit.		No equivalent	
9.1.6.2	When an automatic voice recording facility fails, a manual record of communications must be maintained, to the extent that this is possible.		No equivalent	