Data Catalogue

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Aerodrome / Heliport				A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.							
	ICAO location indicator		Text	The four letter ICAO location indicator of the aerodrome/heliport, as listed in ICAO DOC 7910 (Location Indicators).		Annex 15 App 1 AD 1.3 1)/ AD 2.1					
	Name		Text	The primary official name of an aerodrome as designated by an appropriate authority.		Annex 15 App 1 AD 1.3 1)/ AD 2.1					
	Designator IATA		Text	The identifier that is assigned to a location in accordance with rules (resolution 767) governed by the International Air Transport Association (IATA).		AMDB/EAD SDO					
	Served city		Text	The full name (free text) of the city or town the aerodrome/heliport is serving		Annex 15 App 1 AD 2.2 2)					
	Type of traffic permitted										
		International_national	Code list	Indication if international and/or national flights are permitted at the aerodrome/heliport		Annex 15 App 1 AD 1.3 2)					
		IFR_VFR	Code list	Indication if IFR and/or VFR flights are permitted at the aerodrome/heliport		Annex 15 App 1 AD 1.3 2)/ AD 2.2 7)					
		Sched_nonsched	Code list	Indication if scheduled and/or nonscheduled flights are permitted at the aerodrome/heliport		Annex 15 App 1 AD 1.3 2)					
		Civil_military	Code list	Indication if civil commercial aviation and/or general aviation and/or military flights are permitted at the aerodrome/heliport		Annex 15 App 1 AD 1.3 2)					
		Restricted_use	Text	Indication if an aerodrome or heliport not open for the public (Only for the use of the owners).		AIXM 5.1 AirportHeliport					
	Heliport type		Text	The type of the heliport as mention in Annex 14 Volume II (Surface-level, elevated, shipboard or helideck)		Annex 14 II 2.4.1 a)					
	Control type		Text	Indication if an aerodrome is under civil control, military control or joint control		Annex 4 App 2 Chart symbol					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Certified ICAO		Text	Indication if airport is/is not certified according to the ICAO rules		Annex 15 App 1 AD 1.5					
	Certification date		Date	The date when the airport certification has been issued by the supervising authority.		Annex 15 App 1 AD 1.5 2)					
	Certification expiration date		Date	The date when the airport certification will become invalid.		Annex 15 App 1 AD 1.5 2)					
	Field elevation										
		Elevation	Elevation	The vertical distance above Mean Sea Level (MSL) of the highest point of the landing area.		Annex 15 App 1 AD 2.2 3) Annex 14 I 2.3.1	0.5 m	essential	surveyed	1m or 1 ft	1 m or 1 ft
		Geoid undulation	Height	Geoid undulation at the aerodrome/ heliport elevation position	where appropriate	Annex 15 App 1 AD 2.2 4) Annex 14 I 2.3.1	0.5 m	essential	surveyed	1 m or 1 ft	1 m or 1 ft
	Reference temperature		Value	The monthly mean of the daily maximum temperatures for the hottest month of the year at an aerodrome. This temperature should be averaged over a period of years. (ICAO recommendation)		Annex 15 App 1 AD 2.2 3) Annex 14 I 2.4.1					
	Mean low temperature		Value	The mean lowest temperature of the coldest month of the year, for the last five years of data at the aerodrome elevation.		Doc 8168 Part 3 Sect. 3 4.3.5.2.2	5 degrees				
	Magnetic variation			The angular difference between True North and Magnetic North.							
		Angle	Angle	The magnetic variation angle value		Annex 15 App 1 AD 2.2 5) Annex 14 App 5 Table A5-3	1 degree	essential	surveyed	1 degree	1 degree
		Date	Date	The date on which the magnetic variation had the corresponding value.		Annex 15 App 1 AD 2.2 5)					
		Annual change	Value	The annual rate of change of the magnetic variation.		Annex 15 App 1 AD 2.2 5)					
	Reference point			The designated geographical location of an aerodrome.							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Position	Point	Geographical location of aerodrome reference point.		Annex 15 App 1 AD 2.2 1) Annex 14 2.2.3	30 m	routine	surveyed/ calculated	1 sec	1 sec
		Site	Text	The location of the reference point on the aerodrome.		Annex 15 App 1 AD 2.2 1)					
		Direction	Text	Direction of aerodrome reference point from centre of the city or town which the aerodrome serves		Annex 15 App 1 AD 2.2 2)					
		Distance	Distance	Distance of aerodrome reference point from centre of the city or town which the aerodrome serves		Annex 15 App 1 AD 2.2 2)					
Landing direction indicator				A device to indicate visually the direction currently designated for landing and for take-off.							
	Location		Text	Location of landing direction indicator		Annex 15 App 1 AD 2.15 2)					
	Lighting		Text	Lighting of landing direction indicator	if any	Annex 15 App 1 AD 2.15 2)					
Secondary Power Supply											
	Characteristics		Text	The description of the secondary power supply		Annex 15 App 1 AD 2.15					
	Switch-over time		Value	Secondary power supply switch-over time		Annex 15 App 1 AD 2.15 4) Annex 15 App 1 AD 3.15 4)					
Anemometer				Device used for measuring wind speed							
	Location		Text	Location of anemometer		Annex 15 App 1 AD 2.15 2)					
	Lighting		Text	Lighting of anemometer	if any	Annex 15 App 1 AD 2.15 2)					
ABN / IBN				Aerodrome beacon / identification beacon used to indicate the location of an aerodrome from the air.							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Location		Text	Location of aerodrome beacon/identification beacon	if any	Annex 15 App 1 AD 2.15 1) Annex 15 App 1 AD 3.15 1)					
	Characteristics		Text	Description of aerodrome beacon/identification beacon		Annex 15 App 1 AD 2.15 1) Annex 15 App 1 AD 3.15 1)					
	Hours of operation		Schedule	Hours of operation of aerodrome beacon/identification beacon		Annex 15 App 1 AD 2.15 1) Annex 15 App 1 AD 3.15 1)					
Wind Direction Indicator											
	Location		Text	Location of Wind direction indicator		Annex 15 App 1 AD 3.15 2)					
	Lighting		Text	Lighting of Wind direction indicator		Annex 15 App 1 AD 3.15 2)					
RVR observation site				The observation site of Runway Visual Range.							
	Position		Point	Geographical location of runway visual range (RVR) observation sites		Annex 4 Ch 13 l)					
Frequency Area				Designated part of a surface movement area where a specific frequency is required by air traffic control or ground control.		AMDB					
	Station		Text	Name of the station providing the service		AMDB					
	Frequency		Value	Frequency of the station providing the service		AMDB					
	Boundary		Polygon	Area boundary of the frequency area		AMDB					
Hot spot				A location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.		Annex 4 13.6 h) 14.6 e)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Identifier		Text	The identifier of the hot spot		AMDB					
	Annotation		Text	Additional information about the hot spot		Annex 4 13.6 h)					
	Geometry		Polygon	The geographical area of the hot spot		Annex 4 13.6 h) AMDB					
Runway				A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft. (Annex 14)							
	Designator		Text	The full textual designator of the runway, used to uniquely identify it at an aerodrome/heliport. E.g. 09/27, 02R/20L, RWY 1.		Annex 15 App 1 AD 2.12 1) Annex 14 I 2.5.1 a)					
	Nominal length		Distance	The declared longitudinal extent of the runway for operational (performance) calculations.		Annex 15 App 1 AD 2.12 3) Annex 14 I 2.5.1 a)	1m	critical	surveyed	1 m or 1 ft	1 m
	Nominal width		Distance	The declared transversal extent of the runway for operational (performance) calculations.		Annex 15 App 1 AD 2.12 3) Annex 14 I 2.5.1 a)	1m	essential	surveyed	1 m or 1 ft	1 m
	Geometry		Polygon	Geometries of RunwayElement, RunwayDisplacedArea and RunwayIntersection		AMDB					
	Centre line points										
		Position	Point	The geographical location of runway centre line at each end of the runway, at the stopway and at the origin of each take-off flight path area, and at each significant change in slope of runway and stopway	Definition from Annex 4 3.8.4.2	Annex 14 I App 5 A5-1 Annex 4 Ch 3 and 4, 5 AMDB	1m	critical	surveyed		
		Elevation	Elevation	The elevation of the corresponding centre line point. (See Annex 14 I 2.3.2: ---- for non-precision approaches … any significant high and low intermediate points along the runway shall be measured to the accuracy of one-half metre or foot…)		Annex 14 I 2.3.2 Annex 14 I App 5 A5-2 Annex 4 Ch 3 and 4, 5 AMDB	0.25m	critical	surveyed		
		Geoid undulation	Height	The geoid undulation at the corresponding centre line point		AMDB					
	RWY exit line					AMDB					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Exit guidance line	Line	The geographical location of the runway exit line		Annex 14 AMDB	0.5m	essential	surveyed	1/100 sec	1 sec
		Colour	Text	Colour of runway exit line		AMDB					
		Style	Text	Style of runway exit line		AMDB					
		Directionality	Code List	Directionality of RWY exit line (one-way or two-way)		AMDB					
	Surface type		Text	The surface type of the runway defined as specified in Annex 14 Volume I		Annex 15 App 1 AD 2.12 4) Annex 14 I 2.5.1 a)					
	Strength					Annex 15 App 1 AD 2.12 4)					
		PCN	Text	Pavement classification number		Annex 14 I 2.6.2.a)					
		Pavement type	Text	Pavement type for aircraft classification number — pavement classification number (ACN-PCN) determination		Annex 14 I 2.6.2 b)					
		Subgrade category	Text	Subgrade strength category		Annex 14 I 2.6.2 c)					
		Allowable pressure	Text	Maximum allowable tire pressure category or maximum allowable tire pressure value		Annex 14 I 2.6.2 c)					
		Evaluation method	Text	The evaluation method used		Annex 14 I 2.6.2 c)					
	Strip			A defined area including the runway and the stop-way if provided a) to reduce the risk of damage to aircraft running off a runway; and b) to protect aircraft flying over it during take-off or landing operations							
		Length	Distance	The longitudinal extent of the runway strip.		Annex 15 App 1 AD 2.12 10) Annex 14 I 2.5.1 b)					
		Width	Distance	The transversal extent of the runway strip		Annex 15 App 1 AD 2.12 10) Annex 14 I 2.5.1 b)					
		Surface type	Text	The surface type of the runway strip		Annex 14 I 2.5.1 b)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Transverse slope	Value	The transverse slope of the runway strip		Annex 14 I 3.1.19					
		Longitudinal slope	Value	The longitudinal slope of the runway strip		Annex 14 I 3.4.13					
	Shoulder			An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.							
		Geometry	Polygon	The geographical location of the shoulders		AMDB					
		Surface type	Text	The surface type of the shoulder		AMDB					
		Width	Distance	The width of the runway shoulder		Annex 14 I App 5 Table A5-5	1m	essential	surveyed	1 m or 1 ft	
	Blastpad			Specially prepared surface placed adjacent to the end of a runway to eliminate the erosive effect of the high wind forces produced by airplanes at the beginning of their take-off roll.		AMDB					
		Geometry	Polygon	The geographical location of the blastpad		AMDB					
	Obstacle free zone		Text	Existence of an obstacle-free zone for a precision approach runway category I	when provided	Annex 15 App 1 AD 2.12 11) Annex 14 I 2.5.1 a)					
	RWYmarking										
		Type	Text	Type of runway marking		AMDB					
		Description	Text	Description of the runway markings		Annex 14 2.5.1 g) Annex 15 App 1 AD 2.9 2)					
		Geometry	Polygon	The geographical location of the runway marking		AMDB					
	RWY center line LGT										
		Length	Distance	The longitudinal extent of the runway centre line lights		Annex 15 App 1 AD 2.14 6) Annex 14 I 2.5.1 g)					
		Spacing	Distance	Spacing of runway centre line lights		Annex 15 App 1 AD 2.14 6) Annex 14 I 2.5.1 g)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Colour	Text	Colour of runway centre line lights		Annex 15 App 1 AD 2.14 6) Annex 14 I 2.5.1 g)					
		Intensity	Text	Intensity of runway centre line lights		Annex 15 App 1 AD 2.14 6) Annex 14 I 2.5.1 g)					
		Position	Point	Geographical location of each individual light of the runway center line lights		AMDB					
	RWY Edge LGT										
		Length	Distance	The longitudinal extent of the runway edge lights		Annex 15 App 1 AD 2.14 7) Annex 14 I 2.5.1 g)					
		Spacing	Distance	Spacing of the runway edge lights		Annex 15 App 1 AD 2.14 7) Annex 14 I 2.5.1 g)					
		Colour	Text	Colour of runway edge lights		Annex 15 App 1 AD 2.14 7) Annex 14 I 2.5.1 g)					
		Intensity	Text	Intensity of runway edge lights		Annex 15 App 1 AD 2.14 7) Annex 14 I 2.5.1 g)					
		Position	Point	Geographical location of each individual light of the runway edge lights		AMDB					
	Restriction		Text	Description of restrictions imposed on runway		AMDB					
Runway Direction											
	Designator		Text	The full textual designator of the landing and take-off direction. Examples: 27, 35L, 01R.		Annex 15 App 1 AD 2.12 1) Annex 14 I 2.5.1 a)					
	True bearing		Bearing	The true bearing of the runway.		Annex 15 App 1 AD 2.12 2)	1/100 deg	Routine	surveyed	1/100 degree	1 degree

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						Annex 14 I 2.5.1 a)					
	Type		Text	Type of runway: precision (CAT I, II, III) / non-precision / non-instrument		Annex 14 I 2.5.1 a)					
	Threshold			The beginning of that portion of the runway usable for landing.							
		Position	Point	Geographical location for runway threshold		Annex 15 App 1 AD 2.12 5) Annex 14 I 2.5.2	1m	critical	surveyed	1/100 sec	1 sec
		Elevation	Elevation	Elevation of the runway threshold		Annex 15 App 1 AD 2.12 6) Annex 14 I 2.3.2 /2.3.3	See Note 1)				
		Geoid undulation	Height	WGS-84 Geoid undulation at runway threshold position		Annex 15 App 1 AD 2.12 5) Annex 14 I 2.3.2 / 2.3.3	See Note 2)				
		Type	Text	The indication if the threshold is displaced/ not displaced. A displaced threshold is not located at the extremity of a runway.		Annex 4 13.6 d)					
		Displacement	Distance	Distance of displaced threshold	If displaced threshold	Annex 14 I App 5 Table A5-5	1m	routine	surveyed		
	Runway end			Runway end (flight path alignment point)		Annex 15 App 1 AD 2.12 5)					
		Position	Point	Location of the runway end in the direction of departure		Annex 15 App 1 AD 2.12 5) Annex 14 I App 5 A5-1	1m	critical	surveyed	1/100 sec	1 sec
		Elevation	Elevation	Elevation of the end position of the runway		Annex 14 I 2.3.2 / 2.3.3	see RWY centre line points				
	Departure end of runway			Departure end of the runway (DER), which is the end of the area declared suitable for take-off (i.e. the end of the runway or, where a clearway is provided, the end of the clearway).	Beginning of departure procedure	Doc 8168 II I.3.2.3.1					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Position	Point	Geographical location of DER		Doc 8168 II I.3.2.3.1					
		Elevation	Elevation	The elevation of DER is the elevation of the end of the runway or the elevation of the end of the clearway, whichever is higher.		Doc 8168 II I.3.2.3.1					
	Touchdown zone			The portion of a runway, beyond the threshold, where it is intended landing aeroplanes first contact the runway.							
		Elevation	Elevation	Highest elevation of the touchdown zone of a precision approach runway	precision approach RWY	Annex 14 I 2.3.3	0.25 m or 0.25 ft				
		Slope	Value	The slope of the runway touchdown zone		AMDB					
	Slope		Value	Slope of the runway		Annex 15 App 1 AD 2.12 7) Annex 14 I 2.5.1 a)					
	LAHSO			Land and Hold Short Operations		AMDB					
		Geometry	Line	Geographical location of Land and Hold Short Operations (LAHSO)		AMDB					
		Protected element	Text	Name of runway or taxiway being protected		AMDB					
	Displaced area			That portion of a runway between the beginning of the runway and the displaced threshold.		AMDB					
		Geometry	Polygon	Geographical location of the displaced area		AMDB					
		PCN	Text	Pavement classification number of the displaced area		AMDB					
		Surface type	Text	The surface type of the displaced area		AMDB					
		Aircraft restriction	Text	Usage restriction for specific aircraft type		AMDB					
	Stopway			A defined rectangular area on the ground at the end of take-off run available prepared as a suitable area in which an aircraft can be stopped in the case of an abandoned take-off.							
		Length	Distance	The longitudinal extent of stopway	if any	Annex 15 App 1 AD 2.12 8) Annex 14 I 2.5.1 b)	1m	critical	surveyed	1 m or 1 ft	1 m

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Width	Distance	Width of the stopway		Annex 15 App 1 AD 2.12 8) Annex 14 I 2.5.1 b)	1m	critical	surveyed	1 m or 1 ft	1 m
		Geometry	Polygon	Geographical location of the stopway		AMDB					
		Slope	Value	Slope of stopway		Annex 15 App 1 AD 2.12 7)					
		Surface type	Text	The surface type of the stopway		Annex 15 App 1 AD 2.12 4) Annex 14 I 2.5.1 b)					
	Clearway			A defined rectangular area on the ground or water under the control of the appropriate authority, selected or prepared as a suitable area over which an aeroplane may make a portion of its initial climb to a specified height.							
		Length	Distance	The longitudinal extent of the clearway		Annex 15 App 1 AD 2.12 9) Annex 14 I 2.5.1 f)	1m	essential	surveyed	1 m or 1 ft	
		Width	Distance	The transversal extent of the clearway		Annex 15 App 1 AD 2.12 9) Annex 14 I App 5 Table A5-5	1m	essential	surveyed	1 m or 1 ft	
		Ground profile		The vertical profile (or slope) of the clearway	if any	Annex 14 I 2.5.1 f)					
	RESA			An area symmetrical about the extended runway centre line and adjacent to the end of the strip primarily intended to reduce the risk of damage to an aeroplane undershooting or overrunning the runway.							
		Length	Distance	The longitudinal extent of Runway End Safety Area		Annex 14 I 2.5. b)					
		Width	Distance	The transversal extent of the Runway End Safety Area		Annex 14 I 2.5. b)					
		Longitudinal slope	Value	Longitudinal slope of Runway End Safety Area		Annex 14 I 3.5.10					
		Transverse slope	Value	Tranverse slope Runway End Safety Area		Annex 14 I 3.5.11					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Declared distances										
		TORA	Distance	Take-off run available - The length of runway declared available and suitable for the ground run of an aeroplane taking off.		Annex 15 App 1 AD 2.13 2) Annex 14 I 2.8 a)	1m	critical	surveyed	1 m or 1 ft	1 m
		TODA	Distance	Take-off distance available - The length of the take-off run available plus the length of the clearway, if provided.		Annex 15 App 1 AD 2.13 3) Annex 14 I 2.8 b)	1m	critical	surveyed	1 m or 1 ft	1 m
		ASDA	Distance	Accelerate-stop distance available - The length of the take-off run available plus the length of the stopway, if provided.		Annex 15 App 1 AD 2.13 3) Annex 14 I 2.8 c)	1m	critical	surveyed	1 m or 1 ft	1 m
		LDA	Distance	Landing distance available - The length of runway which is declared available and suitable for the ground run of an aeroplane landing.		Annex 15 App 1 AD 2.13 3) Annex 14 I 2.8 d)	1m	critical	surveyed	1 m or 1 ft	1 m
		Remarks	Text	Remarks including runway entry or start point where alternative reduced declared distances have been declared		Annex 15 App 1 AD 2.13					
	RWY End LGT										
		Colour	Text	Colour of runway end lights		Annex 15 App 1 AD 2.14 8) Annex 14 I 2.5.1.g)					
		Position	Point	Geographical location of each individual light of the runway end lights		AMDB					
	SWY LGT										
		Length	Distance	The longitudinal extent of stopway lights		Annex 15 App 1 AD 2.14 9) Annex 14 I 2.5.1.g)					
		Colour	Text	Colour of stopway lights		Annex 15 App 1 AD 2.14 9) Annex 14 I 2.5.1.g)					
		Position	Point	Geographical location of each individual light of the stopway lights		AMDB					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Approach lighting system										
		Type	Text	Classification of the approach lighting system using as criteria the ICAO Annex 14 standards		Annex 15 App 1 AD 2.14 2) Annex 14 I 2.5.1.g)					
		Length	Distance	The longitudinal extent of approach lighting system.		Annex 15 App 1 AD 2.14 2) Annex 14 I 2.5.1.g)					
		Intensity	Text	A code indicating the relative intensity of the lighting system.		Annex 15 App 1 AD 2.14 2) Annex 14 I 2.5.1.g)					
		Position	Point	Geographical location of each individual light of the approach lighting system		AMDB					
	RWY threshold lights										
		Colour	Text	Colour of runway threshold lights		Annex 15 App 1 AD 2.14 3) Annex 14 I 2.5.1.g)					
		Wing bar color	Text	Colour of runway threshold wing bars		Annex 15 App 1 AD 2.14 3) Annex 14 I 2.5.1.g)					
		Position	Point	Geographical location of each individual light of the threshold and wing bar lights		AMDB					
	Touchdown zone lights										
		Lenght	Distance	The longitudinal extent of the runway touchdown zone lights		Annex 14 I 2.5.1.g)					
		Position	Point	Geographical location of each individual light of the touchdown zone lights		AMDB					
	Visual approach slope indicator system										
		MEHT	Height	Minimum Eye Height over the Threshold		Annex 14 I 2.12 e)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Location	Point	Geographical location of Visual approach slope indicator system		Annex 4 12.10.5					
		Angle	Angle	Nominal approach slope angle(s)		Annex 14 I 2.12 c)					
		Type	Text	Type of VGSI (VASI, PAPI etc.)		Annex 15 App 1 AD 2.14 4) Annex 14 I 2.12 b)					
		Displacement angle	Angle	Where the axis of the system is not parallel to the runway centre line, the angle of displacement and the direction of displacement, i.e. left or right		Annex 14 I 2.12 c)					
		Displacement direction	Text	Where the axis of the system is not parallel to the runway centre line, the angle of displacement and the direction of displacement, i.e. left or right		Annex 14 I 2.12 c)					
	Arresting gear		Line	Geographical location of the aresting gear cable across the runway		AMDB					
	Arresting system			High energy absorbing material located at the end of a runway or stopway designed to crush under the weight of an aircraft as the material exerts deceleration forces on the aircraft landing gear.		AMDB					
		Geometry	Polygon	The geographical location of the arresting system		AMDB					
		Setback	Distance	Setback of the arresting system		AMDB					
		Length	Distance	The longitudinal extent of arresting system		AMDB					
		Width	Distance	The transverse extent of arresting system		AMDB					
Radio altimeter area											
	Length		Distance	The longitudinal extent of radio altimeter area		Annex 14 I 3.8					
	Width		Distance	The transverse extent of radio altimeter area		Annex 14 I 3.8					
	Geometry		Polygon	Geographical location of radio altimeter area		Annex 14 I 3.8					

Note 1)	Threshold elevation for runways with non-precision approaches	0.5m	essential	surveyed	1 m or 1 ft	1 m or 1 ft
	Threshold elevation for runways with precision approaches	0.25m	critical	surveyed	0.1 m or 0.1 ft	0.5 m or 1 ft
Note 2)	WGS-84 geoid undulation at runway threshold, non-precision approaches	0.5m	essential	surveyed	1 m or 1 ft	1 m or 1 ft
	WGS-84 geoid undulation at runway threshold, precision approaches	0.25m	critical	surveyed	0.1 m or 0.1 ft	0.5 m or 1 ft

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
FATO				Final approach and take-off area. A defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by helicopters operated in performance class 1, the defined area includes the rejected take-off area available.						-	-
	Threshold point			The beginning of that portion of the FATO usable for landing.		Annex 14 II 2.4.2					
		Position	Point	Geographical location of FATO threshold point		Annex 14 II App 1 Table A1-1	1m	critical	surveyed	1/100 sec	1 sec
		Elevation	Elevation	Elevation of the FATO threshold		Annex 14 II App 1 Table A1-2	See Note 1)				
		Geoid undulation	Height	WGS-84 Geoid undulation at FATO threshold position		Annex 14 II App 1 Table A1-2	See Note 2)				
	Departure end of runway			Departure end of the runway (DER), which is the end of the area declared suitable for take-off (i.e. the end of the runway or, where a clearway is provided, the end of the clearway or the end of the final approach and take-off (FATO) area).		Doc 8168 II I.3.2.3.2					
		Position	Point	Geographical location of DER		Annex 15 App 1 AD 2.12 5)	1m	critical	surveyed	1/100 sec	1 sec
		Elevation	Elevation	The elevation of the DER is the higher of the elevations of the beginning and end of the runway/FATO.		Doc 8168 II I.3.2.3.2					
	Type		Text	Type of FATO according to ICAO Heliport Manual (Doc 9261)		Annex 14 II 2.4 c)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Designation		Text	The full textual designator of the landing and take-off area.		Annex 14 II 2.4 c) AMDB					
	Length		Distance	The longitudinal extent of FATO		Annex 14 II App 1 Table A1-5	1m	critical	surveyed	1 m or 1 ft	1 m
	Width		Distance	The transversal extent of FATO		Annex 14 II 2.4 c)					
	Geometry		Polygon	Geographical location of FATO element		AMDB					
	Slope		Value	The slope of FATO		Annex 14 II 2.4 c)					
	Surface type		Text	The surface type of FATO		Annex 15 AD 2.16 3) AMDB					
	True bearing		Bearing	The true bearing of the runway		Annex 14 II App 1 Table A1-4	1/100 deg	routine	surveyed	1/100 degree	
	Declared distances					Annex 14 II 2.5					
		TODAH	Distance	Take-off distance available - The length of the FATO plus the length of helicopter clearway (if provided)	and if applicable , alternative reduced declared distances;	Annex 15 App 1 AD 3.13 1) Annex 14 II 2.5 a)	1m	critical	surveyed	1 m or 1 ft	
		RTODAH	Distance	Rejected Take-off distance available - The length of the FATO declared available and suitable for helicopters operated in performance class 1 to complete a rejected take-off.		Annex 15 App 1 AD 3.13 2) Annex 14 II 2.5 b)	1m	critical	surveyed	1 m or 1 ft	
		LDAH	Distance	Landing distance available - The length of the FATO plus any additional area declared available and suitable for helicopters to complete the landing manoeuvre from a defined height.		Annex 15 App 1 AD 3.13 3) Annex 14 II 2.5 c)	1m	critical	surveyed	1 m or 1 ft	
		Remarks	Text	Remarks including entry or start point where alternative reduced declared distances have been declared		Annex 15 App 1 AD 2.13					
	FATO marking										

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Description	Text	Description of FATO markings		Annex 4 13.6.2 g)					
	Approach lighting system					Annex 15 AD 2.16 6) / 3.14 3)					
		Type	Text	Classification of the approach lighting system using as criteria the ICAO Annex 14 standards		Annex 15 AD 2.16 6) / 3.14 3)					
		Length	Distance	The longitudinal extent of approach lighting system.		Annex 15 AD 2.16 6) / 3.14 3)					
		Intensity	Text	A code indicating the relative intensity of the lighting system.		Annex 15 AD 2.16 6) / 3.14 3)					
		Position	Point	Geographical location of each individual light of the approach lighting system		AMDB					
	Area lights										
		Description	Text	Description of area lights		Annex 15 AD 2.16 6) / 3.14 3)					
		Position	Point	Geographical location of each individual light of the area lights		AMDB					
	Aiming point lights										
		Description	Text	Description of aiming point lights		Annex 15 App 1 AD 3.14 4)					
		Position	Point	Geographical location of each individual light of the aiming point lights		AMDB					
TLOF				Touchdown and lift-off area. An area on which a helicopter may touch down or lift off.		Annex 14 II definition					
	Designator		Text	The full textual designator of TLOF		AMDB					
	Centre point					Annex 14 II					
		Position	Point	Geographical location of TLOF threshold point		Annex 15 App 1 AD 2.16 1)	1m	critical	surveyed	1/100 sec	1 sec
		Elevation	Elevation	Elevation of the TLOF threshold		Annex 15 App 1 AD 2.16 2)	See Note 1)				

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Geoid undulation	Height	WGS-84 Geoid undulation TLOF centre point position		Annex 15 App 1 AD 2.16 1)	See Note 2)				
	Length		Distance	The longitudinal extent of TLOF		Annex 14 II 2.4.1 b)	1m	critical	surveyed	1 m or 1 ft	1 m
	Width		Distance	The transversal extent of TLOF		Annex 14 II 2.4.1 b)	1m	critical	surveyed	1 m or 1 ft	1 m
	Geometry		Polygon	Geographical location of TLOF element		AMDB					
	Slope		Value	The slope of TLOF		Annex 4 13.6.2 b)					
	Surface type		Text	The surface type of TLOF		Annex 4 13.6.2 b) AMDB					
	Bearing strength		Value	The bearing strength of TLOF		Annex 4 13.6.2 b)				1 tone	
	Visual approach slope indicator system type		Text	Type of visual approach slope indicator system		Annex 15 App 1 AD 3.14 2) Annex 14 I 2.12 b)					
	Marking										
		Description	Text	Description of TLOF markings		Annex 4 13.6.2 g)					
Safety area				A defined area on a heliport surrounding the FATO which is free of obstacles, other than those required for air navigation purposes, and intended to reduce the risk of damage to helicopters accidentally diverging from the FATO.							
	Length		Distance	The longitudinal extent of safety area		Annex 4 Ch 13 Annex 14 II 2.4.1 d)					
	Width		Distance	The transversal extent of safety area		Annex 4 Ch 13 Annex 14 II 2.4.1 d)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Surface type		Text	The surface type of safety area		Annex 4 Ch 13 Annex 14 II 2.4.1 d)					
Helicopter clearway				A defined area on the ground or water, selected and/or prepared as a suitable area over which a helicopter operated in performance class 1 may accelerate and achieve a specific height.		Annex 14 II definition					
	Length		Distance	The longitudinal extent of the helicopter clearway		Annex 14 II 2.4.1 g)					
	Ground profile		Value	Vertical profile (or slope) of helicopter clearway		Annex 14 II 2.4.1 g)					
			Note 1)	FATO threshold, for heliports with or without a PinS approach FATO threshold, for heliports intended to be operated in accordance with ICAO Annex 14, Appendix 2			0.5m 0.25m	essential critical	surveyed surveyed	1 m or 1 ft 1 m or 1 ft (non-precision) 0.1 m or 0.1 ft (precision)	
			Note 2)	WGS–84 geoid undulation at FATO threshold, TLOF geometric centre, for heliports with or without a PinS approach WGS–84 geoid undulation at FATO threshold, TLOF geometric centre, for heliports intended to be operated in accordance with ICAO Annex 14, Appendix 2			0.5m 0.25m	essential critical	surveyed surveyed	1 m or 1 ft 1 m or 1 ft (non-precision) 0.1 m or 0.1 ft (precision)	

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Apron				A defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading passengers, mail or cargo, fuelling, parking or maintenance.						-	-
	Designator		Text	The full textual name or designator used to identify an apron at an aerodrome/heliport.		Annex 15 App 1 AD 2.8 1)					
	Geometry		Polygon	Geographical location of the apron element		Annex 14 AMDB	1m	routine	surveyed	1/10 sec	1 sec
	Type		Text	Classification of the primary use for the apron		AMDB					
	Aircraft restriction		Text	Usage restriction (prohibition) for specified aircraft type		AMDB					
	Surface type		Text	The surface type of the apron		Annex 15 App 1 AD 2.8 1) Annex 14 I 2.5.1 d)					
	Strength										
		PCN	Text	Pavement classification number of apron		Annex 15 App 1 AD 2.8 1) Annex 14 I 2.6.2.a)					
		Pavement type	Text	Pavement type for aircraft classification number — pavement classification number (ACN-PCN) determination		Annex 15 App 1 AD 2.8 1) Annex 14 I 2.6.2 b)					
		Subgrade category	Text	Subgrade strength category of apron		Annex 15 App 1 AD 2.8 1) Annex 14 I 2.6.2 c)					
		Allowable pressure	Text	Maximum allowable tire pressure category or maximum allowable tire pressure value		Annex 15 App 1 AD 2.8 1)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						Annex 14 I 2.6.2 c)					
		Evaluation method	Text	The evaluation method used to determine the apron strength		Annex 15 App 1 AD 2.8 1) Annex 14 I 2.6.2 c)					
	Elevation		Elevation	The elevation of the apron		Annex 4 14.6 a)					
Taxiway				A defined path on a land aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another,							
	Designator		Text	The full textual designator of the taxiway.		Annex 15 App 1 AD 2.8 2) Annex 14 I 2.5.1 c)					
	Width		Distance	The transversal extent of the taxiway.		Annex 15 App 1 AD 2.8 2) Annex 14 I 2.5.1 c)	1m	essential	surveyed	1 m or 1 ft	
	Geometry		Polygon	Geographical location of the taxiway element		AMDB					
	Bridge		Text	Type of bridge (none, overpass, underpass)		AMDB					
	Surface type		Text	Surface type of taxiway		Annex 15 App 1 AD 2.8 2) Annex 14 I 2.5.1 c) AMDB					
	Strength					Annex 15 App 1 AD 2.8 2)					
		PCN	Text	Pavement classification number of taxiway		Annex 14 I 2.6.2.a)					
		Pavement type	Text	Pavement type for aircraft classification number — pavement classification number (ACN-PCN) determination		Annex 14 I 2.6.2 b)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Subgrade category	Text	Subgrade strength category of taxiway		Annex 14 I 2.6.2 c)					
		Allowable pressure	Text	Maximum allowable tire pressure category or maximum allowable tire pressure value		Annex 14 I 2.6.2 c)					
		Evaluation method	Text	The evaluation method used to determine the taxiway strength		Annex 14 I 2.6.2 c)					
	Aircraft restrictions		Text	Usage restriction (prohibition) for specified aircraft type		Annex 4 14.6 d)					
	Center line points										
		Position	Point	Geographical coordinates of taxiway center line points		Annex 14 I 2.5.3	0.5m	essential	surveyed	1/100 sec	1/100 sec
		Elevation	Elevation	Elevation of taxiway center line points		Annex 14 I App 5 Table A5-2	1m	essential	surveyed		
	Shoulder			An area adjacent to the edge of a pavement so prepared as to provide a transition between the pavement and the adjacent surface.							
		Geometry	Polygon	Geographical location of the taxiway shoulder		AMDB					
		Surface type	Text	Surface type of taxiway shoulder		AMDB					
		Width	Distance	The width of the taxiway shoulder		Annex 14 I App 5 Table A5-5	1m	essential	surveyed	1 m or 1 ft	
	Guidance lines					Annex 15 App 1 AD 2.9 1)					
		Geometry	Line	Geoghraphical location of guidance lines		Annex 15 App 7 Annex 4 App 6 Annex 14 App 5 AMDB	0.5 m	essential	surveyed	1/100 sec	1/100 sec
		Colour	Text	Colour of taxiway guidance lines		AMDB					
		Style	Text	Style of taxiway guidance lines		AMDB					
		Wingspan	Value	Wingspan		AMDB					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Maxspeed	Value	Maximum speed		AMDB					
		Direction	Text	Direction		AMDB					
	Intermediate holding position marking line		Line	Intermediate holding position marking line		Annex 15 App 5 Annex 4 App 6 Annex 14 I App 5	0.5 m	essential	surveyed	1/100 sec	1 sec
	Taxiway marking										
		Description	Text	Description of taxiway marking		Annex 14 I 5.2.1 g) Annex 15 App 1 AD 2.9 2)					
	Taxiway edge lights										
		Description	Text	Description of taxiway edge lights		Annex 15 App 1 AD 2.15 3) Annex 14 I 2.5.1 g)					
		Position	Point	Geographical location of each individual light of the taxiway edge lights		AMDB					
	Taxiway centre line lights										
		Description	Text	Description of taxiway centre line lights		Annex 15 App 1 AD 2.15 3) Annex 14 I 2.5.1 g)					
		Position	Point	Geographical location of each individual light of the taxiway center line lights		AMDB					
	Stop bars										
		Description	Text	Description of the stop bars	if any	Annex 15 App 1 AD 2.9 3)					
		Location	Line	Location of the stop bar							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Runway guard lights										
		Description	Text	Description of the runway guard lights and other runway protection measures	if any	Annex 15 App 1 AD 2.9 3)					
		Location	Point	Location of the stop bar	Configuration A	Annex 14 5.3.23.6 Annex 4 13.6 g)					
		Location	Line	Location of the stop bar	Configuration B	Aennex 14 5.3.23.8 Annex 4 13.6 g)					
	Runway holding position			A designated position intended to protect a runway, an obstacle limitation surface, or an ILS/ MLS critical/sensitive area at which taxiing aircraft and vehicles shall stop and hold, unless otherwise authorized by the aerodrome control tower.							
		Geometry	Line	Geoghraphical location of runwany holding position	n	Annex 14 I App 5 A5-1 Annex 15 App 7 Annex 4 App 6 AMDB	0.5m	essential	surveyed	1/100 sec	1 sec
		Protected runway	Text	Designator of the runway protected		AMDB					
		Catstop	Code list	CAT of runway (0, I, II, III)		AMDB					
		RWY ahead text	Text	Actual text as it exists in the marking. For example, RWY AHEAD or RUNWAY AHEAD.		AMDB					
	Intermediate holding position	Geometry	Line	Geographical location of intermediate holding position - A designated position intended for traffic control at which taxiing aircraft and vehicles shall stop and hold until further cleared to proceed, when so instructed by the aerodrome control tower.		Annex 4 15.6 d) AMDB					
Helicopter ground taxiway				A ground taxiway intended for the ground movement of wheeled undercarriage helicopters. (Annex 14)							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Designator		Text	The full textual designator of helicopter ground taxiway		Annex 4 13.6.1 g)					
	Center line points		Point	Geographical location of helicopter ground center line taxiway points		Annex 14 II 2.4.3 App 1 A1-1	0.5m	essential	surveyed/ calculated		
	Elevation		Elevation	Elevantion of helicopter ground taxiway		Annex 14 II App 1 A1-2	1m	essential	surveyed		
	Width		Distance	The transversal extent of the helicopter ground taxiway		Annex 14 II 2.4.1 e)	1m	essential	surveyed		
	Surface type		Text	The surface type of the helicopter ground taxiway		Annex 14 II 2.4.1 e)					
	Intersection marking line		Line	Helicopter ground taxiway intersection marking line		Annex 14 II Annex 14 II App 1 A1-1	0.5 m	essential	surveyed	1/100 sec	1 sec
	Lighting										
		Description	Text	Description of helicopter ground taxiway light		Annex 14 II 2.4.1 h)					
		Position	Point	Geographical location of each individual light of the helicopter ground taxiway lights		AMDB					
	Marking										
		Description	Text	Description of helicopter ground taxiway marking		Annex 14 II 2.4.1 h)					
Helicopter air taxiway				A defined path on the surface established for the air taxiing of helicopters. (Annex 14)							
	Designator			The full textual designator of helicopter air taxiway		Annex 4 13.6.1 g)					
	Center line points		Point	Geographical location of helicopter air taxiway center line points		Annex 14 II 2.4.3 App 1 A1-1	0.5m	essential	surveyed/ calculated		
	Elevation		Elevation	Elevation of helicopter air taxiway		Annex 14 II App 1 A1-2	1m	essential	surveyed		
	Width		Distance	The transversal extent of the helicopter air taxiway		Annex 14 II 2.4.1 e)	1m	essential	surveyed		
	Surface type		Text	Surface type of helicopter air taxiway		Annex 14 II 2.4.1 e)					
	Lighting										
		Description	Text	Description of helicopter air taxiway lighting		Annex 14 II 2.4.1 h)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Position	Point	Geographical location of each individual light of the helicopter air taxiway lights		AMDB					
	Marking										
		Description	Text	Description of helicopter air taxiway marking		Annex 14 II 2.4.1 h)					
Helicopter air transit routes				A defined path established for the movement of helicopters from one part of a heliport to another. A taxi-route includes a helicopter air or ground taxiway which is centred on the taxi-route.							
	Designator		Text	Designator of helicopter air transit route		Annex 4 13.6.1 g)					
	Geometry		Line	Geographical location of helicopter air transit route		Annex 4 13.6.1 g)					
	Width		Distance	The transversal extent of the helicopter air transit route		Annex 15 App 1 AD 3.8 3)	1m	essential	Surveyed		
INS checkpoint											
	Location		Point	Geographical location of the INS check point	where available	Annex 15 App 1 Table A7-1	0.5m	routine	surveyed	1/100 sec	1/100 sec
VOR checkpoint											
	Location		Point	Geographical location of the VOR check point	where available	Annex 15 App 1 AD 2.8 4) Annex 14 I 2.5.1 h)					
	Frequency		Value	Frequency of the VOR check point		Annex 14 I 2.5.1 h)					
Altimeter checkpoint											
	Location		Point	Geographical location of altimeter checkpoints		Annex 15 App 1 AD 2.8 3) Annex 14 I 2.7.1					
	Elevation		Elevation	Elevation of altimeter checkpoints		Annex 15 App 1 AD 2.8 3)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						Annex 14 I 2.7.3					
Aircraft stand				A designated area on an apron intended to be used for parking an aircraft							
	Name		Text	Name of the aircraft stand point		AMDB					
	Acft stand points	Location	Point	Geographical location of aircraft stand point		Annex 14 I 2.5.4	0.5m	routine	surveyed	1/100 sec	1/100 sec
		Aircraft types	Code list	Aircraft types		AMDB					
	Identification sign		Text	Description of aircraft stand identification sign		Annex 15 App 1 AD 2.9 1) Annex 14 I 5.4.6					
	Visual docking parking guidance system		Text	Description of visual docking/parking guidance system at the aircraft stand		Annex 15 App 1 AD 2.9 1) Annex 14 I 2.5.1 g)					
	Parking stand area		Polygon	Geographical location of parking stand area		AMDB					
	Jetway		Code list	Jetway available at aircraft stand		AMDB					
	Fuel		Code list	Fuel available at aircraft stand		AMDB					
	Ground power		Code list	Ground power available at aircraft stand		AMDB					
	Towing		Code list	Towing available at aicraft stand		AMDB					
	Terminal		Text	Terminal building reference		AMDB					
	Surface type		Text	Surface type of the aircraft stand		AMDB					
	Aircraft restriction		Text	Usage restriction (prohibition) for specified aircraft type		AMDB					
	PCN		Text	Pavement classification number of aircraft stand		AMDB					
	Stand guidance line										
		Geometry	Line	Geographical location of stand guidance line		AMDB	0.5m	essential	surveyed	1/100 sec	
		Elevation	Elevation	Parking guidance line points elevation		Annex 14 App. 5	1m	essential	surveyed		

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Direction	Text	Direction of stand guidance line		AMDB					
		Wingspan	Value	Wingspan		AMDB					
		Colour	Code list	Colour of stand guidance line		AMDB					
		Style	Code list	Style of stand guidance line		AMDB					
Helicopter stand				An aircraft stand which provides for parking a helicopter and where ground taxi operations are completed or where the helicopter touches down and lifts off for air taxi operations. (Annex 14)							
	Name		Text	Name of helicopter stand							
	Location		Point	Geographical location of helicopter stand point/ INS checkpoints		Anex 14 II 2.4.4 Annex 14 II A1-1	0.5m	essential	surveyed	1/100 sec	
De-icing area				A facility where frost, ice or snow is removed (de-icing) from the aeroplane to provide clean surfaces, and/or where clean surfaces of the aeroplane receive protection (anti-icing) against the formation of frost or ice and accumulation of snow or slush for a limited period of time.							
	Identifier		Text	Identifier of de-icing area		AMDB					
	Geometry		Polygon	Geographical location of de-icing area		AMDB	1m	routine	surveyed	1/10 sec	1 sec
	Surface type		Text	The surface type of the deicing area		Annex 14 2.5.1 d)					
	Idbase		Text	Name of underlying Taxiway, Parkingstand or Apron Element		AMDB					
	Aircraft restriction		Text	Usage restriction (prohibition) for specified aircraft type		AMDB					
Communication facility											
	Service designation		Text	Designation of the service provided		Annex 15 App 1 AD 2.18 1)					
	Call sign		Text	Call sign of the communication facility		Annex 15 App 1 AD 2.18 2)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Channel		Text	Channel/Frequency of the communication facility		Annex 15 App 1 AD 2.18 3)					
	Logon address		Text	The logon address of the facility	as approriate	Annex 15 App 1 AD 2.18 4)					
	Hours of operation		Schedule	Operational hours of the station serving the unit		Annex 15 App 1 AD 2.18 5)					

ATS Airspace

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
ATS Airspace				Airspaces of defined dimensions, alphabetically designated, within which specific types of flights may operate and for which air traffic services and rules of operation are specified.							
	Type		Text	Type of ATS airspace according to ICAO Annex 11.		Annex 15 App 1 ENR 2.1 Annex 11 2.5;					
	Designation		Text	The designator given to an airspace by a responsible authority		Annex 15 App 1 ENR 2.1 1) Annex 11 2.11.3;					
	Lateral limits		Polygon	The surface defining the horizontal shape of the Airspace		Annex 15 App 1 ENR 2.1 1) Annex 11 2.10/ App 5 T1;	see Note 1)				
	Vertical limits										
		Upper limit	Altitude	The upper limit of the airspace		Annex 15 App 1 ENR 2.1 2) Annex 11 2.10;					
		Lower limit	Altitude	The lower limit of the airspace		Annex 15 App 1 ENR 2.1 2) Annex 11 2.10;					
	Class of airspace		Code list	A categorisation of airspace which determines the operating rules, flight requirements, and services provided.		Annex 15 App 1 ENR 2.1 3) Annex 11 2.6/ App 4;					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Transition altitude		Altitude	The altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes.		Annex 15 App 1 AD 2.17 5)					
	Hours of applicability		Schedule	The hours of applicability of the airspace		Annex 15 App 1 AD 2.17 6)					
	ATS Unit			Unit providing service							
		Name	Text	The name of the unit providing the service		Annex 15 App 1 ENR 2.1, AD 2.17					
		Call sign	Text	The call sign of the aeronautical station serving the unit		Annex 15 App 1 ENR 2.1, AD 2.17					
		Language	Code list	Information on the language(s) used, specifying area and conditions, when and where to be used, if applicable		Annex 15 App 1 ENR 2.1, AD 2.17					
		Applicability	Text	Information on the area and conditions when to be used		Annex 15 App 1 ENR 2.1					
		Hours of service	Schedule	Operational hours of the station serving the unit		Annex 15 App 1 ENR 2.1, AD 2.17					
	Frequency										
		Value	Value	The frequency of the ATS aispace		Annex 15 App 1 ENR 2.1					
		Purpose	Text	Indications for specific purposes of the frequency		Annex 15 App 1 ENR 2.1					
			Note 1)	FIR, UIR			2 km	routine	declared	1 min	as plotted
				TMA, CTA			100 m	essential	calculated	1 sec	as plotted
				CTR			100 m	essential	calculated	1 sec	as plotted

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Special activity airspace											
	Type		Code list	Type of special activity airspace (See Note 1)		Annex 15 ENR 5.1, 5.2, 5.3					
	Identification		Text	The identification assigned to uniquely identify the airspace		Annex 15 ENR 5.1 1) Annex 11 2.31					
	Name		Text	The name given to the airspace by a responsible authority		Annex 14 ENR 5.1 1)					
	Lateral limits		Polygon	The surface defining the horizontal shape of the airspace		Annex 15 ENR 5.1, 5.2, 5.3	See Note 2) for P,R,D Areas only				
	Vertical limits										
		Upper limit	Altitude	The upper limit of the airspace		Annex 15 ENR 5.1, 5.2, 5.3					
		Lower limit	Altitude	The lower limit of the airspace		Annex 15 ENR 5.1, 5.2, 5.3					
	Restriction		Text	Type of restriction or nature of hazard		Annex 15 ENR 5.1, 5.2, 5.3					
	Activation		Text	Information on system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures;		Annex 15 ENR 5.1, 5.2, 5.3					
	Time of activity		Schedule	Time interval when the special activity takes place		Annex 15 ENR 5.1, 5.2, 5.3					
	Risk of interception		Text	Risk of interception in the event of penetration		Annex 15 ENR 5.1, 5.2, 5.3					
			Note 1) type:	Prohibited Area	Note 2)	inside CTA/CTR	100 m	essential	calculated	1 sec	as plotted
				Restricted Area		outside CTA/CTR	2 km	routine	declared	1 min	as plotted
				Danger Area							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
				Military Execise Area							
				Military Training Area							
				Air Defence Identification Zone (ADIZ)							
				Other							
ATS control sector											
	Identification		Text	The identification given to the sector		Design criteria for sectors to taxi-route be found in. Doc 9426 (ATS Planning Manual)					
	Lateral limits		Polygon	The surface defining the horizontal shape of the ATC-sector							
	Vertical limits										
		Upper limit	Altitude	The upper limit of the sector							
		Lower limit	Altitude	The lower limit of the sector							

Routes, waypoints, en-route holdings

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Route				A specified route designed for channelling the flow of traffic as necessary for the provision of air traffic services							
	Designator		Text	Designators for ATS routes according to Annex 11 Appendix 1 (or Appendix 3 for standard departure and arrival routes)		Annex 11 2.12 / App 1 / App3					
	Designator prefix		Text	The prefix of the route designator as specified in Note 1)		Annex 11 App1					
	Flight rules		Code list	Information on the flight rules that apply on the route (IFR / VFR)							
Route segment											
	Navigation specification		Text	Designation of the navigation specification(s) applicable to a specified segment(s) - There are two kinds of navigation specifications: Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.		Annex 15 App 1 ENR 3.1-.4 1)					
	From point			Reference to the first point of a route segment							
		Name	Text	The coded designators or name-codes of significant point		Annex 15 App 1 ENR 3.1-.4 1)					
		Reporting	Code list	Indication of ATS / MET reporting requirement “compulsory” or“on-request”		Annex 15 App 1 ENR 3.1-.4 1)					
	To point			Reference to the second point of a route segment							
		Name	Text	The coded designators or name-codes of significant point		Annex 15 App 1 ENR 3.1-.4 1)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Reporting	Code list	Indication of the ATS / MET reporting requirement “compulsory” or “on-request”		Annex 15 App 1 ENR 3.1-.4 1)					
	Track		Bearing	Track, VOR radial or magnetic bearing of a route segment		Annex 11 App 5 Table 4 Annex 15 App 1 ENR 3.1-.4 2)	1/10 degree (terminal arrival departure)	routine (terminal arrival departure)	calculated (terminal arrival departure)	1 degree (terminal arrival departure)	1 degree (terminal arrival departure)
	Change over point		Point	The point at which an aircraft navigating on an ATS route segment defined by reference to very high frequency omnidirectional radio ranges is expected to transfer its primary navigational reference from the facility behind the aircraft to the next facility ahead of the aircraft.	in case of VOR radial	Annex 15 App 1 ENR 3.1-.4 2)					
	Length		Distance	The geodesic distance between from point and to point		Annex 11 App 5 Table 5 Annex 15 App 1 ENR 3.1 - .4 2)/3)	See Note 2)				
	Upper limit		Altitude	The upper limit of the route segment		Annex 15 App 1 ENR 3.1 - .4 3)/4)					
	Lower limit		Altitude	The lower limit of the route segment		Annex 15 App 1 ENR 3.1 - .4 3)/4)					
	MEA		Altitude	Minimum en-route altitude (MEA). The altitude for an en-route segment that provides adequate reception of relevant navigation facilities and ATS communications complies with the airspace structure and provides the required obstacle clearance.	Lower ATS Routes	Annex 15 App 1 ENR 3.1 3) Doc 8168 Vol 2 Part II, Section 3, 1.6.1	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
	MOCA		Altitude	Minimum obstacle clearance altitude (MOCA). The minimum altitude for a defined segment of flight that provides the required obstacle clearance.		Annex 15 App 1 ENR 3.1 4) Doc 8168 Vol 2 Part II,	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						Section 3, 1.6.1					
	Minimum flight altitude		Altitude	Minimum flight altitude	Helicopter route	Annex 15 App 1 ENR 3.4 4)	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
	Lateral Limits		Distance	Lateral limits of route		Annex 15 App 1 ENR 3.1 4) / 3.2 4)					
	AMA		Altitude	Area Minimum Altitude (AMA) - The minimum altitude to be used under instrument meteorological conditions (IMC), that provides a minimum obstacle clearance within a specified area, normally formed by parallels and meridians.		Annex 4 8.9.3					
	MVA		Altitude	Minimum Vectoring Altitude		Annex 4 8.9.4 m)					
	Restrictions		Text	Indication on any area speed and level/altitude restrictions where established;		Annex 4 8.9.4 n) Annex 15 App 1 ENR 3.1 - .4 6)/7)					
	Direction of cruise levels		-	Indication on the direction of the cruising level (even, odd, NIL)		Annex 15 App 1 ENR 3.1 -.3 5)					
		Foward	Code list	Indication on the direction of the cruising level (even, odd, NIL) from first point to second point of route segment		Annex 15 App 1 ENR 3.1 -.3 5)					
	-	Backward	Code list	Indication on the direction of the cruising level (even, odd, NIL) from second point to first point of route segment		Annex 15 App 1 ENR 3.1 -.3 5)					
	Availability		Text	Information on the route availability							
	Class of airspace		Text	Classification of airspace (A, B, … G) which determines the operating rules, flight requirements, and services provided. According to Annex 11, Appendix 4		Annex 15 App 1 ENR 3.1 - .4 3)/4)					
	PBN requirements			Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace requirements							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Navigation performance requirements	Text	The navigation accuracy requirement for each PBN (RNAV or RNP) route segment		Annex 15 App 1 ENR 3.1 - .4 5)/6)					
		Sensor requirements	Text	Indication on the sensor requirements including any navigation specification limitations		Annex 15 App1 ENR 3.1- .3 7) / 3.4 6)					
	Controlling unit										
		Name	Text	Name of the unit providing the service		Annex 15 App 1 ENR 3.1 - .4 6)/7)					
		Channel	Text	Operating channel / frequency of controlling unit		Annex 15 App 1 ENR 3.1 - .4 6)/7)					
		Logon address	Text	A specified code used for data link logon to the controlling ATS unit	if applicable	Annex 15 App 1 ENR 3.1 - .4 6)/7)					
			Note 1)	U) Upper	Note 2)	Airway segments length	1/10 km	routine	calculated	1/10 km or 1/10 NM	1 km or 1 NM
				K) Helicopter		Terminal arrival/ departure route segments length	1/100 km	essential	calculated	1/100 km or 1/100 NM	1 km or 1 NM
				S) Supersonic							
				T) Tacan							
				Other							
Waypoint											
	Identification		Text	Names, coded designators or name-codes assigned to the significant point.		Annex 11 App 2 2,3.					
	ATC Reporting requirement		Code list	Indication of ATS / MET reporting requirement “compulsory” or “on-request”		Annex 11 App 2 5.					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Position		Point	Geographical location of the waypoint		Annex 11 App 5 Table 1	100 m	essential	surveyed calculated	1 sec	1 sec
	Formation										
		Navaid	Text	The station identification of the reference VOR/DME		Annex 15 App 1 ENR 3.3 2)a)					
		Bearing	Bearing	The bearing from the reference VOR/DME, if the waypoint is not collocated with it;		Annex 11 App 5 Table 4	See Note 1.				
		Distance	Distance	The distance from the reference VOR/DME, if the waypoint is not collocated with it;		Annex 11 App 5 Table 5	See Note 2.				
					Note 1.	Bearing used for the formation of an en-route and of a terminal fix	1/10 degree	routine	calculated	1/10 degree	1/10 degree
						Bearing used for the formation of an instrument approach procedure fix	1/100 degree	essential	calculated	1/100 degree	1/10 degree
					Note 2.	Distance used for the formation of an en-route fix	1/10 km	routine	calculated	1/10 km or 1/10 NM	2/10 km (1/10 NM)
						Distance used for the formation of a terminal and instrument	1/100 km	essential	calculated	1/100 km or 1/100 NM	2/10 km (1/10 NM)

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						approach procedure fix					
En-route Holding				A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.							
	Identification		Text	Identification of the holding procedure		Annex 15 App 1 ENR 3.6 1)					
	Fix		Text	Identification of the holding procedure fix		Annex 15 App 1 ENR 3.6	100m	essential	surveyed calculated	1 sec	1 sec
	Waypoint		Point	Geographical location of the holding waypoint		Annex 15 App 1 ENR 3.6					
	Inbound track		Bearing	The inbound track of the holding procedure		Annex 15 App 1 ENR 3.6					
	Turn Direction		Text	Direction of the procedure turn		Annex 15 App 1 ENR 3.6					
	Speed		Value	Maximum indicated airspeed		Annex 15 App 1 ENR 3.6					
	Level										
		Minimum holding level	Altitude	Minimum holding level of the holding procedure		Annex 15 App 1 ENR 3.6					
		Maximum holding level	Altitude	Maximum holding level of the holding procedure		Annex 15 App 1 ENR 3.6					
	Time/distance outbound		Value	Time/distance value of the holding procedure		Annex 15 App 1 ENR 3.6					
	Controlling unit										
		Name	Text	Indication of the controlling unit		Annex 15 App 1 ENR 3.6					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Frequency	Value	The operating frequency/channel of the controlling unit		Annex 15 App 1 ENR 3.6					
	Special holding entry procedure		Text	Textual description of the Special VOR/DME entry procedure	In case an entry radial to a secondary fix at the end of the outbound leg has been established for a VOR/DME holding pattern	Doc 8168 Vol 2 Part II Section 4 1.5.1					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Radio navigation aid											
	Type		Text	Type of radio navigation aid		Annex 15 App 1 GEN 2.5 Annex 15 App 1 AD 2.19 1)					
	Identification		Text	The code assigned to uniquely identify the navaid		Annex 15 App 1 GEN 2.5 Annex 15 App 1 AD 2.19 2)					
	Name		Text	The textual name assigned to the navaid		Annex 15 App 1 GEN 2.5 Annex 15 App 1 ENR 4.1					
	Area of operation		Text	Indication whether navigation aid serves en-route (E), aerodrome (A) or dual (AE) purposes.		Annex 15 App 1 GEN 2.5 4)					
	Aerodrome served		Text	The ICAO location indicator or name of the aerodromes served		Annex 15 App 1 AD 3.18 7)					
	Runway served		Text	Designator of the runway served		Info Berz					
	Operating authority		Text	Name of the operating authority of the facility		Annex 15 App 1 AD 2.19 Annex 15 App 1 ENR 4.1					
	Type of supported ops		Code list	Indication of the type of supported operation for ILS/MLS and GBAS		Annex 15 App 1 AD 2.19 1)					
	Co-location		Text	Information that a navaid is co-located with another navaid		Info Berz					
	Hours of operation		Schedule	The hours of operation of the radio navigation aid		Annex 15 App 1 AD					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						2.19 4) Annex 15 App 1 GEN 4.1					
	Magnetic variation			The angular difference between True North and Magnetic North							
		Angle	Angle	The magnetic variation at the radio navigation aid	ILS/NDB	Annex 15 App 1 AD 2.19 1)	See Note 1)				
		Date	Date	The date on which the magnetic variation had the coresponding value.		Annex 15 App 1 AD 2.19 1)					
	Station declination		Angle	An alignment variation of the navaid between the zero degree radial and true north, determined at the time the station is calibrated.	VOR/ILS/ MLS	Annex 15 App 1 AD 2.19 1)					
	Zero bearing direction		Text	Direction of the 'zero bearing' provided by the station. For example: magnetic north, true north	VOR	AIXM 5.1					
	Frequency		Value	Frequency or tuning frequency of the radio navigation aid		Annex 15 App 1 AD 2.19 3) Annex 15 App 1 GEN 4.1					
	Channel		Text	The channel number of the radio navigation aid	DME	Annex 10 3 Table A Annex 15 App 1 GEN 4.1					
	Position		Point	Geographical location of the radio navigation aid		Annex 15 App 1 AD 2.19 5) Annex 14	See Note 2)				
	Elevation		Elevation	The elevation of the transmitting antenna of DME The elevation of GBAS reference point	DME GBAS	Annex 15 App 7 Table A7-2	See Note 3)				
	Ellipsoidal height		Height	The ellipsoid height of the GBAS reference point,	GBAS	Annex 15 App 1 AD 2.19 6) (AMDT 38)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Localizer alignment										
		Bearing	Bearing	The localizer course	ILS Localizer	Annex 14 App 5 Table A5-4	1/100 deg	essential	surveyed	1/100 degree (if true)	1 degree
		Type	Text	Type of localizer alligment, true or magnetic	ILS Localizer						
	Zero azimuth alignment		Bearing	MLS zero azimuth alignment	MLS	Annex 14 App 5 Table A5-4	1/100 deg	essential	surveyed	1/100 degree (if true)	1 degree
	Angle		Angle	The angle of the glide path of an ILS or the normal glide path angle for the MLS installation	ILS GP /MLS	AIXM					
	RDH		Value	The value of the ILS Reference Datum Height (ILS RDH).	ILS GP	Annex 11 App 5 Table 2	0.5m	critical	calculated		
	Localizer antenna rwy end distance		Distance	ILS localizer runway/FATO end distance	ILS Localizer	Annex 14 2.5.1 j)	3 m	routine	calculated	1 m or 1 ft	as plotted
	ILS glideslope antenna TRSH distance		Distance	ILS glideslope antenna - threshold distance along centerline	ILS GP	Annex 14 2.5.1 j)	3 m	routine	calculated	1 m or 1 ft	as plotted
	ILS marker TRSH distance		Distance	ILS marker - threshold distance	ILS	Annex 14 2.5.1 j)	3 m	essentail	calculated	1 m or 1 ft	2/10 km (1/10 NM)
	ILS DME antenna TRSH distance		Distance	ILS DME antenna - threshold distance along centerline	ILS	Annex 14 2.5.1 j)	3 m	essential	calculated	1 m or 1 ft	as plotted
	MLS azimuth antenna rwy end distance		Distance	MLS azimuth antenna - runway/FATO end distance	MLS	Annex 14 2.5.1 j)	3 m	routine	calculated	1 m or 1 ft	as plotted
	MLS elevation antenna TRHS distance		Distance	MLS elevation antenna - threshold distance along centre line	MLS	Annex 14 2.5.1 j)	3 m	routine	calculated	1 m or 1 ft	as plotted
	MLS DME antenna TRHS distance		Distance	MLS DME/P antenna - threshold distance along centre line	MLS	Annex 14 2.5.1 j)	3 m	essential	calculated	1 m or 1 ft	as plotted
	Signal polarization		Code list	GBAS signal polarization (GBAS/H or GBAS/E)	GBAS	Annex 10 Vol I, Att. D, 7.1.10					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	DOC		Text	Designated operational coverage (DOC or stadard service volume SSV) as range or service volume radius from the navaid / GBAS reference point, height and sectors if required		Annex 15 App 1 AD 2.19 7) (AMDT 38) Annex 15 App1 ENR 4.1					
			Note 1)		ILS Localizer	Annex 14 I App 5 Table A5-3	1 degree	essential	surveyed	1 degree	
					NDB	Annex 11 App 5 Table 3	1 degree	routine	surveyed	1 degree	
			Note 2)		Aerodrome Navaid	Annex 14 App 5 Table A5-1 Annex 15 App 7 Table A7-1	3 m	essential	surveyed	1/10 sec	as plotted
					GBAS Ref Point	Annex 10 Vol 1, Chapter 3 App B 3.6.7.2.3.4 Recommendation	1 m				
					Enroute	Annex 15 App 7 Table A7-2 Annex 11 App 5 Table 1	100 m	essential	surveyed	1 sec	
			Note 3)		DME	Annex 11 App 5 Table 2	30m (100ft)	essential	surveyed	30 m (100 ft)	30 m (100 ft)
					DME/P	Annex 14 App 5 Table A5-2	3 m	essential	surveyed	3 m (10 ft)	

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
					GBAS Ref Point	Annex 10 Vol 1, Chapter 3 App B 3.6.7.2.3.4 Recommendation Annex 15 App 7 Table A7-2	0.25 m	essential		1 m or 1 ft	
GNSS				A worldwide position and time determination system that includes one or more satellite constellations, aircraft receivers and system integrity monitoring, augmented as necessary to support the required navigation performance for the intended operation.							
	Name		Text	The name of the GNSS element (GPS, GBAS, GLONASS, EGNOS, MSAS, WAAS, etc.)		Annex 15 App 1 ENR 4.3					
	Frequency		Value	Frequency of the GNSS	as apprioriate	Annex 15 App 1 ENR 4.3					
	Service area		Polygon	Geographical location of the GNSS service area		Annex 15 App 1 ENR 4.3					
	Coverage area		Polygon	Geographical location of the GNSS coverage area		Annex 15 App 1 ENR 4.3					
	Operating authority		Text	Name of the operating authority of the facility		Annex 15 App 1 ENR 4.3					
Aeronautical ground lights				Ground lights and other light beacons designating geographical positions which are selected by the State as being significant							
	Type		Text	Type of beacon		Annex 15 App 1 ENR 4.5					
	Designator		Text	The code assigned to uniquely identify to the beacon		Annex 15 App 1 ENR 4.5					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Name		Text	The name of the city or town or other identification of the beacon		Annex 15 App 1 ENR 4.5					
	Intensity		Value	Intensity of the light of the beacon		Annex 15 App 1 ENR 4.5				1000 candela	
	Characteristics		Text	Information about the characteristics of beacon		Annex 15 App 1 ENR 4.5					
	Hours of operations		Schedule	The hours of operation of the beacon		Annex 15 App 1 ENR 4.5					
	Position		Point	Geographical location of the beacon		Doc 8126 Appendix ENR 4.5 5)					
Marine lights											
	Position		Point	Geographical location of the beacon		Annex 4 16.9.7					
	Visibility range		Distance	The visibility range of the beacon		Annex 4 16.9.7					
	Characteristics		Text	Information about the characteristics of the beacon		Annex 4 16.9.7					
Special navigation system				Stations associated with special navigation systems (DECCA, LORAN, etc.),							
	Type		Text	Type of service available (master signal, slave signal, colour);		Annex 15 App 1 ENR 4.2					
	Designator		Text	The code assigned to uniquely identify to the special navigation system		AIXM 5.1					
	Name		Text	The textual name assigned to the special navigation system		Annex 15 App 1 ENR 4.2					
	Frequency		Value	Frequency (channel number, basic pulse rate, recurrence rate, as applicable) of the special navigation system		Annex 15 App 1 ENR 4.2					
	Hours of operations		Schedule	The hours of operation of the special navigation system		Annex 15 App 1 ENR 4.2					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Position		Point	Geographical location of the special navigation system		Annex 11 App 5 Table 1 Annex 15 App 1 ENR 4.2	100m	essential	surveyed / calculated		
	Operating authority		Text	Name of the operating authority of the facility		Annex 15 App 1 ENR 4.2					
Special navigation system				Stations associated with special navigation systems (DECCA, LORAN, etc.),							
	Type		Text	Type of service available (master signal, slave signal, colour);		Annex 15 App 1 ENR 4.2					
	Designator		Text	The code assigned to uniquely identify to the special navigation system		AIXM 5.1					
	Name		Text	The textual name assigned to the special navigation system		Annex 15 App 1 ENR 4.2					
	Frequency		Value	Frequency (channel number, basic pulse rate, recurrence rate, as applicable) of the special navigation system		Annex 15 App 1 ENR 4.2					
	Hours of operations		Schedule	The hours of operation of the special navigation system		Annex 15 App 1 ENR 4.2					
	Position		Point	Geographical location of the special navigation system		Annex 11 App 5 Table 1 Annex 15 App 1 ENR 4.2	100m	essential	surveyed / calculated		
	Operating authority		Text	Name of the operating authority of the facility		Annex 15 App 1 ENR 4.2					
	Facility coverage		Text	Description of special navigation system faciity coverage		Annex 15 App 1 ENR 4.2					

Obstacles

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Obstacle				All fixed (whether temporary or permanent) and mobile obstacles or parts thereof,							
	Obstacle identifier		Text	Unique identifier of obstacle		Annex 15 App 8 Table A8-4					
	Geometry type		Code list	An indication whether the obstacle is a point, line or polygon.		Annex 15 App 8 Table A8-4					
	Horizontal position		Point Line Polygon	Horizontal position of obstacle		Annex 15 App 8 Table A8-4 Annex 14 2.5.5	See Note 1)				
	Horizontal extent		Distance	Horizontal extent of the obstacle		Annex 15 App 8 Table A8-4					
	Elevation		Elevation	Elevation of the highest point of the obstacle.		Annex 15 App 8 Table A8-4 Annex 14 2.5.5	See Note 2)				
	Height		Height	Height of the obstacle above ground		Annex 15 App 8 Table A8-4					
	Type		Text	Type of obstacle		Annex 15 Ch 10 Annex 14 2.5.5					
	Date and time stamp		Date	Date and time the obstacle was created		Annex 15 App 8 Table A8-4					
	Operations		Text	Feature operations of mobile obstacles		Annex 15 App 8 Table A8-4					
	Effectivity		Text	Effectivity of temporary types of obstacles		Annex 15 App 8 Table A8-4					
	Lighting										

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Type	Text	Type of lighting		Annex 15 App 8 Table A8-4 Annex 14 2.5.5					
		Colour	Text	Colour of the obstacle lighting		Annex 15 App 8 Table A8-4					
	Marking		Text	Type of marking of obstacle		Annex 15 App 8 Table A8-4 Annex 14 2.5.5					
	Material		Text	Predominant surface material of the obstacle		AMDB					
			Note 1)	Obstacles in Area 1			50 m	routine	surveyed	1 sec	as plotted
				Obstacles in Area 2			5 m	essential	surveyed	1/10 sec	1/10 sec
				Obstacles in Area 3			0.5 m	essential	surveyed	1/10 sec	1/10 sec
				Obstacles in Area 4			2.5 m	essential	surveyed		
			Note 2)	Obstacles in Area 1			30 m	routine	surveyed	1 m or 1 ft	3 m (10 ft)
				Obstacles in Area 2			3 m	essential	surveyed	1 m or 1 ft	1 m or 1 ft
				Obstacles in Area 3			0.5 m	essential	surveyed	0.1 m or 0.1 ft 0.01 m	1m or 1 ft
				Obstacles in Area 4			1 m	essential	surveyed	0.1 m	

Procedures

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Procedure											
	Identification									-	-
		FAS Guidance	Code list	The name describing the type of radio navigation aid providing the final approach lateral guidance. This could be: ILS, VOR, RNAV, etc.	APCH	ICAO DOC 8168 VOL II Part I.4.9.5.2.1				-	-
		Runway	Text	The runway designator of the landing and take-off direction. Examples: 27, 35L, 01R.		ICAO DOC 8168 VOL II Part I.4.9.5.2.1					
		Circling	Code list	Indication if a procedure is/ is not a circling approach	APCH	ICAO DOC 8168 VOL II Part I.4.9.5.2.5					
		Multiple Code	Text	A single letter suffix, starting with the letter z following the radio navigation aid type shall be used if two or more procedures to the same runway cannot be distinguished by the radio navigation aid type only. For example: VOR y RWY 20 VOR z RWY 20	APCH	ICAO DOC 8168 VOL II Part I.4.9.5.3					
		NS Limiter	Text	Sensor specific information in case of a limitation of use	PBN only	ICAO DOC 8168 VOL II Part III.5.1.3.4					
		Name	Text	Name of the instrument flight procedure		ICAO DOC 8168 VOL II Part I.4.9.5.2					
	Plain Language Designation										
		Basic Indicator	Text	The basic indicator shall be the name or name-code of the significant point where the standard departure route terminates.	SID, STAR	Annex 11 Appendix 3, 2.1.1 a) and 2.1.2					
		Validity Indicator	Text	The validity indicator shall be a number from 1 to 9.	SID, STAR	Annex 11 Appendix 3,					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						2.1.1 b) and 2.1.3					
		Route Indicator	Text	The route indicator shall be one letter of the alphabet. The letters "I" and "O" shall not be used.	SID, STAR	Annex 11 Appendix 3, 2.1.1 c) and 2.1.4					
		Procedure Type	Code list	Indication of the type of procedure (departure, arrival, approach, other)		Annex 11 Appendix 3, 2.1.1 d)					
		Visual Indication	Text	Indication if the route has been established for use by aircraft operating in accordance with the visual flight rules (VFR)	VFR only	Annex 11 Appendix 3, 2.1.1 e)					
	Coded Designation					Annex 11 Appendix 3, 2.2					
		Significant Point	Text	The coded designator or name-code of the significant point	SID, STAR	Annex 11 Appendix 3, 2.2 a)					
		Validity Indicator	Text	The Validity Indicator of the procedure	SID, STAR	Annex 11 Appendix 3, 2.2 b)					
		Route Indicator	Text	The Route Indicator of the procedure	SID, STAR	Annex 11 Appendix 3, 2.2 c)					
	Procedure Type		Code list	Indication of the type of procedure (departure, arrival, approach, other)		Annex 11 Appendix 3, 2.1.1 d)					
	PBN or Conventional		Code list	Indication if the procedure is PBN or Conventional	IFR only	Doc 8168, Vol II, Part III, Section 5, 1.3.2.1					
	Precision Type		Text	The instrument procedure type. Instrument approach procedures are classified as follows: Non-precision approach (NPA) procedure. - An instrument approach procedure which utilizes lateral guidance but does not utilize vertical guidance. Approach procedure with vertical guidance (APV). - An instrument procedure which utilizes lateral and vertical guidance but does not meet the	APCH	Annex 10 Chapter 1					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
				requirements established for precision approach and landing operations. Precision approach (PA) procedure. - An instrument approach procedure using precision lateral and vertical guidance with minima as determined by the category of operation.							
	Aircraft Category		Code list	Indication of which aircraft categories the procedure is intended for							
	Magnetic variation		Value	The magnetic variation considered for the procedure design		ICAO Annex 4 11.8 Doc 8168, Vol II, Part I, Section 2, 1.11 and Annex, 9.7 and 10.7					
	OCA/H			Obstacle clearance Altitude (Height)	APCH	ICAO Doc 8168, Vol II, Part I, Section 4, 5.4	as specified in Doc 8168				
		Aircraft category	Code list	Aircraft category according to ICAO Doc 8168 Vol I or II	APCH	ICAO Doc 8168, Vol II, Part I, Section 4, 1.8.4					
		Approach type	Code list	Approach type (e.g. Straight-in Cat I, Cat II, LLZ, Circling ...) or specific navigation aid (e.g. stepdown fixes), or a specific navigation specification	APCH	ICAO Doc 8168, Vol II, Part I, Section 4, 9.5.4					
		Altitude	Altitude	The lowest altitude used in establishing compliance with appropriate obstacle clearance criteria.	APCH	ICAO Doc 8168, Vol II, Part I, Section 4, 5.4.1	as specified in Doc 8168	essential			
		Height	Height	The lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable used in establishing compliance with appropriate obstacle clearance criteria.	APCH	ICAO Doc 8168, Vol II, Part I, Section 4, 5.4.1	as specified in Doc 8168	essential			

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	DA/H			Decision Altitude (Height)	APCH						
		Aircraft category	Code list	Aircraft category according to ICAO Doc 8168 Vol I or II	APCH						
		Approach type	Code list	Approach type (e.g. Straight-in, Circling ...) or specific navigation aid (e.g. stepdown fixes), or a specific navigation specification	APCH						
		Altitude	Altitude	A specified altitude in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established	APCH	Annex 11 App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
		Height	Height	A specified height in a 3D instrument approach operation at which a missed approach must be initiated if the required visual reference to continue the approach has not been established	APCH	Annex 11 App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
	MDA/H			Minimum Descent Altitude (Height)	APCH						
		Aircraft category	Code list	Aircraft category according to ICAO Doc 8168 Vol I or II	APCH						
		Approach type	Code list	Approach type (e.g. Straight-in, Circling ...) or specific navigation aid (e.g. stepdown fixes), or a specific navigation specification	APCH						
		Altitude	Altitude	A specified altitude in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference.	APCH	Annex 11 App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
		Height	Height	A specified height in a 2D instrument approach operation or circling approach operation below which descent must not be made without the required visual reference.	APCH	Annex 11 App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
	MSA			Minimum sector altitude - The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.	IFR only	ICAO Doc 8168, Vol II, Part I.4.8.2					
		Sector start angle	Angle	Start angle of a sector		ICAO Doc 8168, Vol II, Part I.4.8.2					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Sector end angle	Angle	End angle of a sector		ICAO Doc 8168, Vol II, Part I.4.8.2					
		Based on Fix	Text	Center of the MSA		ICAO Doc 8168, Vol II, Part I.4.8.2					
		Altitude	Altitude	The minimum altitude for each sector		ICAO Doc 8168, Vol II, Part I.4.8.2 Annex 11 App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
		Restrictions	Text	Minimum sector altitude - The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.		ICAO Doc 8168, Vol II, Part I.4.8.2					
		Radius	Value	The radius of each sector		ICAO Doc 8168, Vol II, Part I.4.8.2					
	TAA			Terminal arrival altitude - The lowest altitude that will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an arc of a circle defined by a 46 km (25 NM) radius centred on the initial approach fix (IAF), or where there is no IAF on the intermediate approach fix (IF), delimited by straight lines joining the extremity of the arc to the IF. The combined TAAs associated with an approach procedure shall account for an area of 360 degrees around the IF.	APCH, PBN only	ICAO DOC 8168 Vol II, Part III, Section 2, Chapter 4					
		Reference point	Text	TAA reference point (IAF or IF)		ICAO DOC 8168 VOL II III-2-4-1					
		IAF	Text	TAA Initial Approach Fix reference point		ICAO DOC 8168 VOL II III-2-4-1					
		IF	Text	TAA Intermediate Fix reference point		ICAO DOC 8168 VOL II III-2-4-1					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Dist To IAF	Distance	The distance of the TAA area boundary from the IAF		ICAO DOC 8168 VOL II III-2-4-1					
		Altitude	Altitude	The terminal arrival altitude value		ICAO DOC 8168 VOL II III-2-4-1 Annex 11, App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
		Sector start angle	Angle	Start angle of a sector (bearing to TAA reference point		ICAO DOC 8168 VOL II III-2-4-1					
		Sector end angle	Angle	End angle of a sector (bearing to TAA reference point)		ICAO DOC 8168 VOL II III-2-4-1					
		Stepdown arc	Distance	Radius of inner area with lower altitude.		ICAO DOC 8168 VOL II III-2-4-1					
	Nav Spec Name		Text	A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications: Required navigation performance (RNP) specification. A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH. Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.	PBN only	ICAO DOC 8168 VOL II III-5-1-2 1.3.4 Annex 4, Para graph 9.8 and 10.8					
	Operating minima		Text	Aerodrome Operating Minima - The limits of usability of an aerodrome for: a) take-off, expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions; b) landing in precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation;	APCH, DEP	ICAO Doc 9365 Chapter 2 Annex 15 (AIP AD 1.1.4)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
				c) landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H); and d) landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions							
	Temperature					ICAO DOC 8168 VOL II III-3-4-8 4.6					
		Minimum temperature	Value	Minimum temperature reference	APCH, PBN only						
		Maximum temperature	Value	Maximum temperature reference	APCH, PBN only						
	Remote Altimeter Source		Text	Cautionary note indicating the altimetry source	APCH	ICAO DOC 8168 Vol II, Part I, Section 4, 5.4.5.3.1					
	Proc Ref Datum		Text	Airport or landing threshold	APCH						
	PBN Requirements			Specific requirements related to a PBN procedure	PBN	ICAO DOC 8168 VOL II, Part III, Section 5, 1.3.4					
		Navigation specification	Code list	Identification of the navigation specification (RNAV 5, PBN 0.3 …)		ICAO DOC 8168 VOL II, Part III, Section 5, 1.3.4 a)					
		Navigation sensor limitations	Text	Any navigation sensor limitations (GNSS required …)		ICAO DOC 8168 VOL II, Part III, Section 5, 1.3.4 b)					
		Functional requirements	Text	Any required functionalities that are described as options in the navigation specification, that is, not		ICAO DOC 8168 VOL II,					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
				included in the core navigation specification (RF required …)		Part III, Section 5, 1.3.4 c)					
Procedure Segment					SID, STAR, APCH						
	Start		Text	Identification of the start point of the segment							
	End		Text	Identification of the end point or a description of the end of the segment							
	End fix functionality		Code list	Indication if the end fix is a fly-by point (A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure) or fly-over point (A waypoint at which a turn is initiated in order to join the next segment of a route or procedure)	PBN						
	End fix role		Code list	Indication of the role of the end fix (MAPt, IF, IAF, FAF, MAHF…)		Doc 8168, Vol II, Part I, Section 2, 2,2.2 Terminal Area Fixes					
	Procedure altitude/height		Altitude/Height	A specified altitude/height flown operationally a tor above the minimum altitude/height and established to accommodate a stabilized descent ata prescribed descent gradient/angle in the intermediate/final approach segment.	SID, STAR, APCH certain segments only		as specified in Doc 8168	essential			
	MOCA		Altitude	The minimum altitude for a defined segment that provides the required obstacle clearance.	SID, STAR, APCH	Annex 11, App 5	50 m	routine	calculated	50 m or 100 ft	50 m or 100 ft
	Distance		Distance	Geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point;		DOC 8169 Vol II Part III, Sec 5, Chapt 2 Annex 11 App 5 Annex 4 App 6; Annex 15 App 7 Terminal	1/100 km	essential	calculated	1/100 km or 1/100 NM	1 km or 1 NM

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						Arr/Dep Route Segment					
	True bearing		Bearing	True track to the nearest tenth of a degree to the nearest degree between each successive significant point;	SID, STAR, APCH	DOC 8169 Vol II Part III, Sec 5, Chapt 2 Annex 11 App 5 Terminal Arr/Dep Route Segment	1/10 degree	routine	calculated	1/10 degree	
	Magnetic bearing		Bearing	Magnetic track to the nearest tenth of a degree to the nearest degree between each successive significant point;	SID, STAR, APCH	DOC 8169 Vol II Part III, Sec 5, Chapt 2 Annex 11 App 5 Terminal Arr/Dep Route Segment Annex 4 App 6; Annex 15 App 7	1/10 degree	routine	calculated	1 degree	1 degree
	Gradient		Value		APCH, DEP						
	Speed		Value	speed limit at a significant point, expressed in units of 10 knots applicable							
	Controlling obstacle				APCH, DEP						
		Type	Text	Indication if the obstacle is lit/unlit, type of obstacle (church/windturbine,…)							
		Position	Point	coordinates of the controlling obstacle			see obstacles				
		Elevation:	Elevation	elevation of the top of the controlling obstacle			see obstacles				

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Final Approach Segment				That segment of an instrument approach procedure in which alignment and descent for landing are accomplished.	SBAS APCH GBAS APCH						
	Operation type		Text	A number that indicates the type of the final approach segment (e.g "0" is coded for a straight-in approach procedure including offset procedures.)		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. a)					
	Approach performance designator		Text	A number that identifies the type of an approach. (“0” is used to identify an LPV approach procedure and a “1” indicates a Category I approach procedure)		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. e)					
	SBAS provider		Text	Identifier of a particular satellite-based approach system service provider	SBAS only	Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. b)					
	RPDS		Text	Reference path data selector (RPDS) - A numerical identifier that is unique on a frequency in the broadcast region and used to select the FAS data block.	GBAS only	Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. g)					
	RPI		Text	Reference Path Identifier - A four-character identifier that is used to confirm selection of the correct approach procedure.		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						III, Sec. 2, Chapt. 6, App A, 3. h)					
	LTP/FTP			Landing threshold point (LTP) or fictitious threshold point (FTP)							
		Position	Point	Latidude and Longitude of the LTP/FTP		Doc 8168, Vol II, Part III, Sec. 2, 6.4.1 and Chapt. 6, App A, 3. i) j)	0.3 m (1 ft)	critical		0.0005" (0.01")	
		Ellipsoid height	Elevation	The height of the LTP/FTP above the WGS-84 ellipsoid		Doc 8168, Vol II, Part III, Sec. 2, 6.4.1 and Chapt. 6, App A, 3. k)	0.25 m	critical		0.1 m	
		Orthometric height	Elevation	The height of the LTP/FTP as related to the geoid and presented as an MSL elevation		Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. w)					
	FPAP			Flight path alignment point (FPAP)		ICAO DOC 8169 Vol II Part III-5-2					
		Position	Point	Latidude and Longitude of the FPAP		Doc 8168, Vol II, Part III, Sec. 2, 6.4.1 and Chapt. 6, App A, 3. l) m)	0.3 m (1 ft)	critical		0.0005" (0.01")	
		Orthometric height	Elevation	The height of the FPAP as related to the geoid and presented as an MSL elevation		Annex 10 Vol I, App B, 3.6.4.5.1					
	TCH		Height	Approach Threshold Crossing Height (TCH) - The designated crossing height of the flight path angle above the LTP (or FTP).		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2,	0.5 m	critical	calculated	0.05 m	

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
						6.4.1 and Chapt. 6, App A, 3. n)					
	GPA		Value	Glide Path Angle (GPA) - The angle of the approach path (glide path) with respect to the horizontal plane defined according to WGS-84 at the LTP/FTP.		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec 2, 6.4.1 and Chapt. 6, App A, 3. p)	0.01°	N/A		0.01°	
	Course Width at threshold		Value	The semi-width of the lateral course width at the LTP/FTP, defining the lateral offset at which the receiver will achieve full-scale deflection.		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2, 6.4.1 and Chapt. 6, App A, 3. q)	N/A	critical		25 m	
	Delta Length Offset		Distance	The distance from the stop end of the runway to the FPAP. It defines the location where lateral sensitivity changes to the missed approach sensitivity.		Annex 10 Vol I, App B, 3.6.4.5.1 Doc 8168, Vol II, Part III, Sec. 2, 6.4.1 and Chapt. 6, App A, 3. r)	N/A	N/A		8 m	
	HAL		Value	Horizontal Alert Limit	SBAS only	Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. s)					
	VAL		Value	Vertical Alert Limit	SBAS only	Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A, 3. t)					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	FAS Data Block		Text	Binary string describing the Final Approach Segment (FAS) data block generated with an appropriate software tool. The FAS data block is set of parameters to identify a single precision approach or APV and define its associated approach		Annex 10 Vol I, Att D, 6.6 and 7.11. Doc 8168, Vol II, Part III, Sec. 2, Chapt. 6, App A 1 and App B 1					
	CRC Remainder		Text	An 8-character hexadecimal representation of the calculated remainder bits used to determine the integrity of the FAS data block data during transmission and storage.		Annex 10 Vol I, App B, 3.6.4.5.1					
Procedure Fix										-	-
	Identification		Text	Names, coded designators or name-codes assigned to the significant point.						-	-
	ATC Reporting requirements		Text	Indication of ATS / MET reporting requirement “compulsory”, “on-request” or "nil"							
	VFR Reporting point		Text	Bridge, Church Name	VFR	Annex 4 Appnedix 2 Page 2-18					
	Position		Point	Geographical location of the fix		Annex 4 App 6; Annex 11 App 5; Annex 15 App 7	See Note 1.				
	Type		Text	Indication of the type of fix, such as: Navaid, Int, WPT							
	Formations										
		Navaid	Text	The station identification of the reference VOR/DME							
		Bearing	Bearing	The bearing from the reference VOR/DME, if the waypoint is not collocated with it;		Annex 4 App 6; Annex 11 App 5; Annex 15 App 7	See Note 2.				

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Distance	Distance	The distance from the reference VOR/DME, if the waypoint is not collocated with it;		Annex 4 App 6; Annex 11 App 5; Annex 15 App 7	1/100 km	essential	calculated	1/100 km or 1/100 NM	2/10 km (1/10 NM)
					Note 1.	En-route navaids and fixes,holding , STAR/SID points	100 m	essential	surveyed / calculated	1 sec	1 sec
						Final approach fixes/points and other essential fixes/points comprising the instrument approach procedure	3 m	essential	surveyed / calculated	1/10 sec	1 sec
					Note 2.	Bearing used for the formation of an en-route and of a terminal fix	1/10 degree	routine	calculated	1/10 degree	1/10 degree
						Bearing used for the formation of an instrument approach procedure fix	1/100 degree	essential	calculated	1/100 degree	1/10 degree
Procedure Holding				A predetermined manoeuvre which keeps an aircraft within a specified airspace while awaiting further clearance.		Annex 4, Paragraph 9.8 and 10.8				-	-
	Identification		Text	Identification of the holding procedure							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Fix		Point	Geographical location that serves as a reference for a holding procedure.			same as proc fix				
	Inbound course		Course	Inbound true course		Doc 8168, Vol II, Part III, Section 5, 2.1.j 2.2.k				1/10 degree	
	Outbound course		Course	Outbound true course						1/10 degree	
	Leg distance		Distance	Outbound distance of the leg		Doc 8168, Vol II, Part III, Section 5, 2.1.j 2.2.k				1/10 km or 1/10 NM	
	Leg time		Value	Outbound time of the leg		Doc 8168, Vol II, Part III, Section 5, 2.1.j 2.2.k					
	Limiting radial		Angle	Limiting radial from the VOR/DME on which the holding is based		Doc 8168 Vol II Part II, Section4 1.5.2.2.2					
	Turn direction		Value	Direction of the procedure turn		Annex 15 App 1 ENR					
	Minimum altitude		Altitude	Minimum holding level to the nearest higher 50 m or 100 ft/flight level		Doc 8168, Vol II, Part III, Section 5, 2.1.j 2.2.k Annex 11, App 5	50 m	routine	calculated	50 m or 100 ft/flight level	
	Maximum altitude		Altitude	Maximum holding level to the nearest higher 50 m or 100 ft/flight level		Doc 8168, Vol II, Part III, Section 5, 2.1.j 2.2.k				50 m or 100 ft/flight level	
	Speed		Value	Maximum indicated air speed		Doc 8168, Vol II, Part III, Section 5, 2.1.j 2.2.k				10 kts	
	Magnetic variation					Doc 8168, Vol 2, Part 3, Chapter 7					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Angle	Angle	The magnetic variation of the radio navigation aid of the procedure							
		Date	Date	The date on which the magnetic variation had the corresponding value.							
	Nav Spec Name		Text	Name of the Navigation Specification - set of aircraft and aircrew requirements needed to support a navigation application within a defined airspace concept	RNAV/RNP	Doc 9613					
Helicopter Procedure Specifics						Doc 8168 Vol II, Part IV, 1.4				-	-
	Helicopter Procedure Title (RNAV 263)		Text	Identification of the helicopter procedure							
	HCH		Height	Heliport crossing height		Annex 15 App 7 (AMDT 38)		essential		1 m or 1 ft	1 m or 1 ft
	IDF		Point	Initial departure fix	DEP	Doc 8168 Vol II, Part IV, 1.4					
	MAPt		Point	Missed Approach Point	APCH						
	Direct Visual Segment			For PinS APP: the portion of flight that connects directly the PinS to the landing location. For PinS DEP: the portion of flight that connects directly the landing location to the IDF							
		Track	Line							-	-
		Distance	Distance			Doc 8168 Vol II, Part IV, 2.12.7 d)				-	-
		Bearing	Angle			Doc 8168 Vol II, Part IV, 2.12.7 d)				-	-
		Crossing height	Height							-	-
	Manoeuvring VS			Maneuvering Visual Segment - PinS visual segment protected for the following manoeuvres: For PinS APCH: Visual manoeuvre from the MAPt around the heliport or landing location to land from a direction other than directly from the MAPt. For PinS DEP: Take-off in a direction other than	APCH DEP					-	-

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
				directly to the IDF followed by visual manoeuvre to join the instrument segment at the IDF.							
		Center line	Angle	Centre line of take-off climb surface	DEP	Doc 8168 Vol II, Part IV, 1.4.7.1				-	-
		Manoeuvring Area	Polygon	Area where the pilot is expected to manoeuvre visually	APCH DEP	Doc 8168 Vol II, Part IV, 1.4.7.2 and 2.12.7 e)				-	-
		No Manoeuvring Area	Polygon	Area where manoeuvring is prohibited	APCH DEP	Doc 8168 Vol II, Part IV, 1.4.7.3 and 2.12.7 f)				-	-
		Ingress Tracks	Line	Maneuvering Visual Segment - PinS visual segment protected for the following manoeuvres: For PinS APCH: Visual manoeuvre from the MAPt around the heliport or landing location to land from a direction other than directly from the MAPt. For PinS DEP: Take-off in a direction other than directly to the IDF followed by visual manoeuvre to join the instrument segment at the IDF.	APCH DEP	Doc 8168 Vol II, Part IV, 1.4.7.3 and 2.12.7 f)				-	-
	HAS			Height above surface diagram	APCH	Doc 8168 Vol II, Part IV, 2.12.7 h)				-	-
		Radius	Distance			Doc 8168 Vol II, Part IV, 2.12.7 h)				-	-
		Height above Surface	Height			Doc 8168 Vol II, Part IV, 2.12.7 h)				-	-
	Proceed Visually Text		Text	Text indicating that the procedure has Proceeed Visually instruction						-	-
	Proceed VFR Text		Text	Text indicating that the procedure has Proceeed VFR instruction						-	-
	VSDA		Value	Visual segment descent angle						-	-
	Ingress Tracks									-	-
		Length	Distance							-	-

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
		Width	Distance							-	-
		Bearing	Angle							-	-
AITF				Notes on charts (Aeronautical Information in Textual Format)		Doc 8168, Vol II, Part III, Section 5, 1.3.4					
	Non-align between Instrument and Visual Slope Indications		Text								
	Missed Approach Description		Text	Missed approach description for the procedure							
	SID/STAR Route Description		Text	Textual description of the SID or STAR procedure							
	Missed Apch Climb Gradient		Value	the value of the missed apprach climb gradient for the approach procedure							
	CAT H Note		Text								
	CAT D Large		Text								
	Authorization Required		Text	Indication that RNP AR							
	Units of Measure		Text								
	GNSS In-Lieu-Of										
	Comm Failure		Text	Communication failure description							
	Surveillance/Radar Required										
	SID Close-in Obstacle Note		Text	Indication wherever close-in obstacles exist which were not considered in the determination of the published procedure design gradient		Doc 8168, Vol 2					
	Off-Set Alignment										

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	PDG greater than 3%										

Aeronautical Chart 1:500 0000

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Buildings				Buildings (of operational significance) and other salient/prominent (aerodrome) features		Annex 4 4.7, 5.5, 13.6, 14.6, 15.6					
	Name		Text	Name of the building		Annex 4 4.7, 5.5, 13.6, 14.6, 15.6					
	Geometry		Polygon	Geographical location of the building		Annex 4 4.7, 5.5, 13.6, 14.6, 15.6					
Built up areas				Areas covered by cities, towns and villages		Annex 4 16.7 17.7 18.6					
	Name		Text	Name of the build-up area		Annex 4 16.7 17.7 18.6					
	Geometry		Point/ Polygon	Geographical location of the build-up area		Annex 4 16.7 17.7 18.6					
Railroads				All railroads having landmark value		Annex 4 16.7 17.7 18.6					
	Name		Text	Name of the railroad		Annex 4 16.7 17.7 18.6					
	Geometry		Line	Geographical location of the railroads		Annex 4 16.7 17.7 18.6					
Highways and Roads				All highways and roads having landmark value		Annex 4 16.7 17.7 18.6					
	Name		Text	Name of highways and roads		Annex 4 16.7 17.7 18.6					
	Geometry		Line	Geographical location of highways and roads		Annex 4 16.7 17.7 18.6					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
Landmarks				Natural and cultural landmarks, such as bridges, prominent transmission lines, permanent cable car installations, wind turbines, mine structures, forts, ruins, levees, pipelines, rocks, bluffs, cliffs, sand dunes, isolated lighthouses and lightships, when considered to be of importance for visual air navigation.		Annex 4 16.7 17.7 18.6					
	Characteristics		Text	Description of the landmark		Annex 4 16.7 17.7 18.6					
	Geometry		Line	Geographical location of the railroads		Annex 4 16.7 17.7 18.6					
Political boundaries				International political boundaries							
	Geometry		Line	Geographical location of international political boundaries		Annex 4 16.7 17.7 18.6					
Hydrography				All water features comprising shore lines, lakes, rivers and streams (including those non-perennial in nature), salt lakes, glaciers and ice caps		Annex 4 4.7 7.6 8.6 9.6 10.6 11.7, 12.7 16.7 17.7 18.6 AMDB (water)					
	Name		Text	Name of the water feature		Annex 4 4.7 7.6 8.6 9.6 10.6 11.7, 12.7 16.7 17.7 18.6 AMDB (water)					
	Geometry		Line/ Polygon	Geographical location of water feature		Annex 4 4.7 7.6 8.6 9.6 10.6 11.7, 12.7 16.7 17.7 18.6 AMDB (water)					
Wooded areas				Wooded areas							

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
	Geometry		Polygon	Geographical location of wooded area		Annex 4 16.7 17.7 18.6					
Service roads				Part of aerodrome surface used by service vehicles		AMDB					
	Geometry		Polygon	Geographical location of the service roads		AMDB					
	featbase		Text	Identification of the feature type affected		AMDB					
	ldbase		Text	Name of the underlying taxiway, parking stand area or apron		AMDB					
Construction area				Part of aerodrome area under construction		AMDB					
	Geometry		Polygon	Geographical location of the construction area		AMDB					
Aircraft movement unsuitable area				Areas unsuitable for aircraft movement		Annex 4 13.6 14.6					
	Geometry		Polygon	Depicted movement area permanently unsuitable for aircraft, clearly identified as such		Annex 4 13.6 14.6					
Survey control point				A monumented survey control point							
	idnumber		Text	Special unique identifier permanently assigned to a feature instance by the data provider		AMDB					
	Location		Point	Geographical location of the survey control point		AMDB					
	Elevation		Elevation	Elevation of survey control point		AMDB					
ASRN node				A vertex in a graph defining the Aerodrome Surface Routing Network		AMDB					
	idnetwrk		Text	Logical name comprised of a delimited list of names for one or more features associated with this ASRN feature		AMDB					
	idthr		Text	Name of feature instance		AMDB					
	idnumber		Text	Special unique identifier permanently assigned to a feature instance by a data provider		AMDB					
	termref		Text	Terminal building associated with the feature instance		AMDB					
	nodetype		Text	Type of node		AMDB					
	catstop		Text	Low visibility operation category of holding position		AMDB					
	Position		Point	Geographical location of the ASRN node		AMDB					

Subject	Property	Sub-Property	Type	Description	Note	Reference	Accuracy	Integrity	Orig Type	Pub. Res.	Chart Res.
ASRN edge				A connection between the nodes in a graph defining the Aerodrome Surface Routing Network							
	idnetwrk		Text	Logical name comprised of a delimited list of names for one or more features associated with this ASRN feature		AMDB					
	direc		Text	Directionality of corresponding feature instance, which can be one-way or two-way		AMDB					
	node1ref		Text	The idnumber of the ASRN Node corresponding to the start point of the edge geometry		AMDB					
	node2ref		Text	The idnumber of the ASRN Node corresponding to the end point of the edge geometry		AMDB					
	edgetype		Text	Type of edge		AMDB					
	edgederv		Text	Derivation method of edge geometry		AMDB					
	Geometry		Line	Geographical location of the ASRN edge		AMDB					