

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	caracterisation of the difference
Annex 14 chapter 1 ; GAR Subpart A	1.1 (and manual on certification of aerodromes 3.A.2)	GAR 1. A010 and GAR 1.C008	definitions/ terminology	definitions of terms in Annex 14 paragraph 1.1, "manual on certification of aerodromes paragraph 3.A.2" and "manual on certification of aerodromes appendix 3"	<u>same definitions as in Annex 14 + manual except : change in the definition of: aerodrome operator, safety management system; and addition of the definition of : Aerodrome organisation (to be checked), aerodrome manager (?), audit, Civil aviation authority (?), hazard, inspections, provider, Type A chart (?), risk, qualitative safety level, quantitative safety level, safety assessment, safety assurance documentation (?), Safety case, safety level, safety management, safety objective, safety performance indicator, safety plan, safety policy (?)</u>	introduction in GAR of new definitions and changes in the definitions
	1.2.2	GAR 1. A005	Applicability of the regulation	Annex 14 applicable to "all aerodromes open to public use" (except chapter 3 : apply to land aerodromes)	applicable "to certificated aerodromes or aerodromes intending to be certificated" and "to military aerodromes certificated for civil use and military aerodromes that intend to be certificated"	in GAR the CAA can choose to which aerodrome apply the regulation and introduction of military airports
	1.2.1	ACJ-GAR 1.C001 Background	responsibilities for determination or actions	"the responsibility for whatever determination or action is necessary shall rest with the State having jurisdiction on the aerodrome"	introduction of the Aerodrome operator	different responsibility for the State in GAR ?
	1.2.3	?	general requirement about colour	" Whenever a colour is referred to in this annex, the specifications for that colour given in Appendix 1 shall apply"	?	missing requirements in GAR
	1,3	GAR 1.A???	Common reference system	definition of the horizontal reference system, vertical reference system and temporal reference system	?	missing requirements and recommendations in GAR

Differences between ICAO annex 14 and GAR

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1,5	?	Airport design	Architectural and infrastructure-related requirements for the optimum implementation of international civil aviation security measures shall be integrated into the design and construction of new facilities and alterations to existing facilities at an aerodrome.	?	missing requirement in GAR (because related to security)?
1,6	GAR 1.B030	reference code	explanation of the purpose and use of reference codes in introductory note	?	missing explanation about aerodrome reference code
1.6.3 and 1.6.4	GAR 1.B030 ?	determination of the reference code numbers and letters	The code number for element 1 shall be determined from Table 1-1, column 1, selecting the code number corresponding to the highest value of the aeroplane reference field lengths of the aeroplanes for which the runway is intended. Note.— The determination of the aeroplane reference field length is solely for the selection of a code number and is not intended to influence the actual runway length provided. The code letter for element 2 shall be determined from Table 1-1, column 3, by selecting the code letter which corresponds to the greatest wing span, or the greatest outer main gear wheel span, whichever gives the more demanding code letter of the aeroplanes for which the facility is intended. Guidance to assist the appropriate authority in determining the aerodrome reference code is given in the Aerodrome Design Manual, Parts 1 and 2.	?	missing explanation about aerodrome reference code
1.?	GAR 1.A015	objective of the regulation	?	safety objective (An aerodrome organization, its facilities, equipment and systems shall be designed and operated, so that for any hazard, the combination of the probability of occurrence and the severity of the consequences of the hazard occurring must result in a level of risk that is acceptable. )	GAR deals only with safety requirements and recommendations

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	?	GAR 1.A025	Exemptions and flexibility provisions	differences can be notified to ICAO	Exemptions from the requirements of this GAR shall be granted only in exceptional circumstances and subject to such conditions as the CAA finds appropriate subject to maintaining the acceptable level of safety.	As a general rule, no no exemptions are allowed in GAR
Annex 14 chapter 2 - GAR Subpart E	2.1.2	GAR1.E001 (c)	integrity of data	Contracting states shall ensure the integrity	the aerodrome operator shall ensure	transfer of responsibility from CAA to aerodrome operator
	2.1.4	GAR1.E001 (d)	integrity level of routine data	a 16 bit algorithm should apply	a 16 bit algorithm shall apply	a recommendation becomes compulsory
	2.3.2	GAR1.E010 (b)	aerodrome and runway elevation	"for an aerodrome used by international civil aviation for non-precision approaches" (..)accuracy of 0.5 m	"for an aerodrome for non-precision approaches"(..)accuracy of 0.5 m	GAR affects more aerodromes
	2.4.2	GAR1.E015 (b)	aerodrome reference temperature	recommendation for the calculus of the aerodrome reference temperature	requirement for the calculus of the aerodrome reference temperature	a recommendation becomes compulsory
	2.5.5	GAR1.E020 (d)	aerodrome information	"the top elevation of obstacles" shall be reported	"top elevation rounded up to the nearest metre or foot" shall be reported	GAR gives more details on how to report
	2.9.1 2.9.2	GAR1.D035 and ACJ-GAR1.D035	condition of the movement area and related facilities	information on the condition of the movement area and related facilities shall be reported to AIS and ATS.	information on the condition of the movement area and all facilities+ obstacle environment+ navigational aids + ATS shall be reported to AIS and ATS, via NOTAM on the short term and AIP in the long term	GAR is more detailed in the means of reporting and broader on the things to report
	2.9.4	GAR1.D035 (d)	description of water on a runway	"whenever water is present on a RWY, a description of the runway surface should be made available"	whenever water is present on a RWY, a description of the runway surface shall be made available	a recommendation becomes compulsory
	2.9.9 to 2.9.11	GAR 1.D035	report of presence of snow and ice	report to SNOWTAM and NOTAM in Annex 15	presence of snow and ice (...) shall be reported on SNOWTAM form	GAR introduces an obligation to use international NOTAM form
	2.11.1	GAR1.d035 (f) (1)	information about RFF	information on the level of protection shall be made available	information on the level of protection shall be reported to the AIS	GAR is more specific

Differences between ICAO annex 14 and GAR

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	2.11.2 and 2.11.4	GAR1.d035 (f) (1) and (2)	expression of the level of protection for RFF (normally and in the case of a significant change)	the level of protection (...) should be expressed in term of the category of RFF and in accordance with the types and amounts of extinguishing agents	the level of protection (...) shall be expressed in term of the category of RFF and in accordance with the types and amounts of extinguishing agents	a recommendation becomes compulsory
Annex chapter 3 - GAR Subpart F	3.1.1	GAR 1.F001 and ACJ-GAR 1.F001 ?	number and orientation of RWYs	usability factor of at least 95%	?	missing recommendation in GAR
	3.1.2	GAR 1.F001 and ACJ-GAR 1.F001 ?	choice of maximum permissible cross-wind components	interdiction to fly when the cross-wind component exceeds a certain value	?	missing recommendation in GAR
	3.1.3	GAR 1.F001 and ACJ-GAR 1.F001 ?	data to be used for the calculation of usability factor	recommendation on the selection of data	?	missing recommendation in GAR
	3.1.4	GAR 1.F001 and ACJ-GAR 1.F001 ?	normal location of a threshold	threshold should normally be located at the extremity of the RWY	?	missing recommendation in GAR
	3.1.5	GAR 1.F001 and ACJ-GAR 1.F001 ?	location of a displaced threshold	advices for the location of a displaced threshold	?	missing recommendation in GAR
	3.1.6	GAR 1.F001 and ACJ-GAR 1.F001 ?	"Actual length of RWYs"	advices to determine the actual runway length	?	missing recommendation in GAR
	3.1.7	GAR 1.F001 and ACJ-GAR 1.F001 ?	secondary runway length	advices to determine the actual secondary runway length	?	missing recommendation in GAR
	3.1.8	GAR 1.F001 and ACJ-GAR 1.F001 ?	runways with stopways and clear ways	advices referring to Attachment A section2	?	missing recommendation in GAR (including Attachment A section 2, except friction on wet RWYs)
	3.1.9	GAR 1.F001 (b)	Width of RWY	minimum width of RWY should not be less than the given values	minimum width of RWY shall not be less than the given values	a recommendation becomes compulsory
	3.1.10 and 3.1.11	GAR 1.F001 (c)	minimum distance between parallel RWYs	recommendation on the minimum distance between parallel RWYs	requirement on minimum distance between parallel RWYs	a recommendation becomes compulsory

Differences between ICAO annex 14 and GAR

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3.1.12 to 3.1.18	GAR 1.F001 (d)	slopes on runways	recommendation on longitudinal slopes, longitudinal slope change, sight distance, distance between slope changes, transverse slope	requirement on longitudinal slopes, longitudinal slope change, sight distance, distance between slope changes, transverse slope	recommendations become compulsory
3.1.19	GAR 1.F001 (e)	strength of runway	recommendation on strength of runway	requirement on strength of runway	a recommendation becomes compulsory
3.1.23	GAR 1.F001 (f)(3)	surface of runway ;	measurement of friction should be done with a continuous device	measurement of friction shall be done with a continuous device	a recommendation becomes compulsory (note: this recommendation was made compulsory in Annex 14 with 10.2.3)
3.1.24	GAR 1.F001 (f) (4)	surface of runway ;	average surface texture depth of a new surface should be not less than 1.0 mm	average surface texture depth of a new surface shall be not less than 1.0 mm	a recommendation becomes compulsory
3.1.25	GAR 1.F001 (f) (5)	surface of runway ;	When the surface is grooved or scored, the grooves or scorings should be either perpendicular to the runway centre line or parallel to nonperpendicular transverse joints, where applicable.	When the surface is grooved or scored, the grooves or scorings shall be either perpendicular to the runway centre line or parallel to nonperpendicular transverse joints, where applicable.	a recommendation becomes compulsory
3.2.1 and 3.2.2	GAR 1.F005 (a)	runway shoulders	they should be provided for a RWY code D or E with width < 60m, and for code F RWYs	they shall be provided for a RWY code D or E with width < 60m, and for code F RWYs	a recommendation becomes compulsory
3.2.3	GAR 1.F005 (a)	runway shoulders width	The runway shoulders should extend symmetrically on each side of the runway so that the overall width of the runway and its shoulders is not less than a certain value	The runway shoulders shall extend symmetrically on each side of the runway so that the overall width of the runway and its shoulders is not less than a certain value	a recommendation becomes compulsory
3.2.4	GAR 1.F005 (b)	runway shoulders slope	The surface of the shoulder that abuts the runway should be flush with the surface of the runway and its transverse slope shall not exceed 2.5 per cent	The surface of the shoulder that abuts the runway shall be flush with the surface of the runway and its transverse slope shall not exceed 2.5 per cent	a recommendation becomes compulsory

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3.2.5	GAR 1.F005 (c)	runway shoulders strength	A runway shoulder should be prepared or constructed so as to be capable of supporting the aeroplane without inducing structural damage to the aeroplane and of supporting ground vehicles which may operate on the shoulder.	A runway shoulder shall be prepared or constructed so as to be capable of supporting the aeroplane without inducing structural damage to the aeroplane and of supporting ground vehicles which may operate on the shoulder.	a recommendation becomes compulsory
3,3	Subpart F ?	runway turn pad	runway turn pads shall be provided when the end of the RWY is not served by a taxiway (or a taxiway turnaround) and is code D E F; they shall be designed with the given clearance values. Recommendations are given for the slopes, strength, surface, shoulders of turn pads.	?	No GAR requirement or recommendations about runway turn pads (whether it is providing, design, larger wheel-to-edge when bad conditions, slopes, strength, surface, shoulders)
3.4.4 and 3.4.5	GAR 1.F010 (c) (2) and (3)	Width of RWY strips for non-precision RWY and non-instrument RWYs	recommendations on the Width of RWY strips for non-precision RWY and non-instrument RWYs	requirement on the Width of RWY strips for non-precision RWY and non-instrument RWYs	a recommendation becomes compulsory
3.4.6	GAR 1.F010 (d)	objects on a runway strip	recommendation on removal of objects on a runway strip	requirement on removal of objects on a runway strip	requirement on removal of objects on a runway strip
3.4.7	GAR 1.F010 (d)	mobile objects on a rwy strip	"no mobile object shall be permitted on this part of the runway strip during use of the rwy for landing or take-off"	?	missing of a requirement in GAR
3.4.8, 3.4.9 and 3.4.11	GAR 1.F010 (e)	grading of runway strips	recommendations on the grading of rwy strips	requirements on the grading of rwy strips	a recommendation becomes compulsory
3.4.12 to 3.4.15	GAR 1.F010 (f)	slopes of runway strips	recommendations on the slopes of rwy strips	requirements on the slopes of rwy strips	a recommendation becomes compulsory
3.4.16 and 3.4.17	GAR 1.F010 (g)	strength of runway strips	recommendations on the strength of rwy strips	requirements on the strength of rwy strips	a recommendation becomes compulsory
3.5.3	GAR 1.F015 (b)(1)	dimension of RESA	the extension of the RESA after the end of the strip should be at least of 240m (code 3 and4)or 120m (code 1 and 2)	the extension of the RESA after the end of the strip shall be at least of 240m (code 3 and4)or 120m (code 1 and 2)	a recommendation becomes compulsory

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3.5.4 and 3.5.5	GAR 1.F015 (b)(2)	width of RESA	the width of a RESA shall be equal 2*RWY width, and when practicable should be equal to the graded portion of the RWY strip	The width of a runway end safety area shall, wherever practicable, be equal to that of the graded portion of the associated strip.	a recommendation becomes compulsory, replacing another less stringent requirement
3.5.6	GAR 1.F015 (c)	objects on RESA	An object situated on a runway end safety area which may endanger aeroplanes should be, when practicable be regarded as an obstacle and shall be removed.	An object situated on a runway end safety area which may endanger aeroplanes shall be regarded as an obstacle and shall be removed.	a recommendation becomes compulsory
3.5.7	GAR 1.F015 (d)	clearing and grading of RESA	A runway end safety area should provide a cleared and graded area for aeroplanes which the runway is intended to serve in the event of an aeroplane undershooting or overrunning the runway.	A runway end safety area shall provide a cleared and graded area for aeroplanes which the runway is intended to serve in the event of an aeroplane undershooting or overrunning the runway.	a recommendation becomes compulsory
3.5.8	GAR 1.F015 (e)(1)	slopes on RESA : general	The slopes of a runway end safety area should be such that no part of the runway end safety area penetrates the approach or take-off climb surface	The slopes of a runway end safety area shall be such that no part of the runway end safety area penetrates the approach or take-off climb surface	a recommendation becomes compulsory
3.5.9	GAR 1.F015 (e)(2)	slopes on RESA : longitudinal slopes	The longitudinal slopes of a runway end safety area should not exceed a downward slope of 5 per cent. Longitudinal slope changes shall be as gradual as practicable and abrupt changes or sudden reversals of slopes avoided	The longitudinal slopes of a runway end safety area shall not exceed a downward slope of 5 per cent. Longitudinal slope changes shall be as gradual as practicable and abrupt changes or sudden reversals of slopes avoided	a recommendation becomes compulsory
3.5.10	GAR 1.F015 (e)(3)	slopes on RESA : transversal slopes	The transverse slopes of a runway end safety area should not exceed an upward or downward slope of 5 per cent. Transitions between differing slopes should be as gradual as practicable	The transverse slopes of a runway end safety area shall not exceed an upward or downward slope of 5 per cent. Transitions between differing slopes shall be as gradual as practicable	a recommendation becomes compulsory
3.5.11	GAR 1.F015 (f)	strength of RESA	A runway end safety area should be so prepared or constructed as to reduce the risk of damage to an aeroplane undershooting or overrunning the runway, enhance aeroplane deceleration and facilitate the movement of rescue and fire fighting vehicles	A runway end safety area shall be so prepared or constructed as to reduce the risk of damage to an aeroplane undershooting or overrunning the runway, enhance aeroplane deceleration and facilitate the movement of rescue and fire fighting vehicles	a recommendation becomes compulsory

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3.6 (3.6.1 to 3.6.6)	GAR 1.F020	clearways	recommendation on the location (end of TORA), length (<0.5*TORA), width(>75m on each side of RWY), slopes of clearways and objects on clearways	requirement on the location (end of TORA), length (<0.5*TORA), width(>75m on each side of RWY), slopes of clearways and objects on clearways	recommendations become compulsory
3.7.2	GAR 1.F025 (c)	stopway slopes	Slopes and changes in slope on a stopway, and the transition from a runway to a stopway, should comply with the specifications for the runway with which the stopway is associated except in a few (given) cases	Slopes and changes in slope on a stopway, and the transition from a runway to a stopway, shall comply with the specifications for the runway with which the stopway is associated except in a few (given) cases	a recommendation becomes compulsory
3.7.3	GAR 1.F025 (d)	strength of stopway	A stopway should be prepared or constructed so as to be capable, in the event of an abandoned take-off, of supporting the aeroplane which the stopway is intended to serve without inducing structural damage to the aeroplane.	A stopway shall be prepared or constructed so as to be capable, in the event of an abandoned take-off, of supporting the aeroplane which the stopway is intended to serve without inducing structural damage to the aeroplane.	a recommendation becomes compulsory
3.7.4 and 3.7.5	GAR 1.F025(e)	surface of stopways	the stopway surface should have a good coefficient of friction	the stopway surface shall have a good coefficient of friction	a recommendation becomes compulsory
3,8	GAR 1.F030	Radio altimeter operating area	recommendations on providing (precision approach rwy), dimensionning ( 300m before the threshold , 60m width) and giving a slope to Radio altimeter operating area	requirements on providing (precision approach rwy), dimensionning ( 300m before the threshold , 60m width) and giving a slope to Radio altimeter operating area	a recommendation becomes compulsory
3.9.1 to 3.9.11	GAR 1.F035 (a) to (f)	Taxiways	recommendations on when to provide taxiways, on widths of taxiways, on taxiway curves, on junctions and intersections,on taxiway minimm separation distance, and on slopes of taxiways	requirements on when to provide taxiways, on widths of taxiways, on taxiway curves, on junctions and intersections,on taxiway minimm separation distance, and on slopes of taxiways	recommendations become compulsory
3.9.12	GAR 1.F035 (g)	strength of taxiways	The taxiway strength should be at least equal to that of the runway it serves, due consideration being given to the fact that a taxiway will be subjected to a graeter density of traffic (...)	A taxiway shall be capable of withstanding the traffic of aeroplanes the taxiway is intended to serve	GAR is more stringent (taxiway is considered as independent from the RWY(s) it serves)
3.9.13 to 3.9.18	GAR 1.F035 (h) and (i)	taxiways	recommendations on surface of taxiways and rapid exit taxiways	requirement on surface of taxiways and rapid exit taxiways	recommendations become compulsory
3.9.20 and 3.9.21	GAR 1.F035 (j) (2) and (3)	taxiways on bridges	recommendations on access and construction of taxiways on bridges	requirements on access and construction of taxiways on bridges	recommendations become compulsory

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3.10	GAR 1.F040 (a)	taxiway shoulder width	?	"The taxiway shoulder width requirement shall be based on the most critical aeroplane operating at this time."	introduction of a requirement on taxiway shoulder width
3.10.1 and 3.10.2	GAR 1.F040 (b) and (c)	taxiway shoulder	recommendations on where to provide taxiway shoulders and taxiway shoulder surface (for turbine-engined aeroplane use)	recommendations on where to provide taxiway shoulders and taxiway shoulder surface (for turbine-engined aeroplane use)	recommendations become compulsory
3.10 ?	GAR 1.F040 (d)	thickness of taxiway shoulders	?	The thickness of taxiway shoulder shall be able to accommodate an occasional passage of the critical aeroplane for pavement design, and the critical axle load of emergency or maintenance vehicles which may pass over the area.	introduction of a requirement on taxiway shoulder thickness
3.10 ?	GAR 1.F040 (e)	taxiway shoulders surface measures against erosion	?	Taxiway shoulders shall be paved or stabilized to reduce the possibility of blast erosion and engine ingestion problems associated with jet engines which overhang the edge of the taxiway pavement. Soil with turf not suitable for this purpose requires a stabilized or low cost paved surface.	introduction of a requirement on taxiway shoulder pavement
3.10 ?	GAR 1.F040 (f)	taxiway shoulders surface	?	The surface of the shoulder that abuts the taxiway shall be flush with the surface of the taxiway.	introduction of a requirement on taxiway shoulder surface
3.11.2 to 3.11.6	GAR 1.F045 (a) to (f)	Taxiway strips	recommendations on taxiway strip width, objects on taxiway strips, grading of taxiway strips, slopes of taxiway strips	requirements on taxiway strip width, objects on taxiway strips, grading of taxiway strips, slopes of taxiway strips	recommendations become compulsory
3.13 (3.13.1 to 3.13.6)	GAR 1.F055 (a) to (g)	Aprons	recommendations on when to provide aprons, size of aprons, strength of aprons, slopes on aprons, clearance distance on aircraft stands	requirements on when to provide aprons, size of aprons, strength of aprons, slopes on aprons, clearance distance on aircraft stands	recommendations become compulsory

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3.14.2	GAR 1.F060 (b)	isolated parking aircraft position	The isolated aircraft parking position should be located at the maximum distance practicable and in any case never less than 100 m from other parking positions, buildings or public areas, etc. Care should be taken to ensure that the position is not located over underground utilities such as gas and aviation fuel and, to the extent feasible, electrical or communication cables.	The isolated aircraft parking position shall be located at the maximum distance practicable and in any case never less than 100 m from other parking positions, buildings or public areas, etc. Care shall be taken to ensure that the position is not located over underground utilities such as gas and aviation fuel and, to the extent feasible, electrical or communication cables.	a recommendation becomes compulsory	
3.15.2 to 3.15.5	GAR 1.F065 (b)	de-icing/anti-icing facilities	recommendations on location, and size of de-icing/anti-icing facilities	requirements on location, and size of de-icing/anti-icing facilities	recommendations become compulsory	
3.15.6	GAR 1.F065 (?) or ACJ-GAR 1.F065	number of de-icing/anti-icing pads	recommendation to take into account meteo, type of aeroplane, method of deicing, equipment used, and departure flow rate for designing de-icing/anti-icing pads	?	missing recommendation in GAR	
3.15.7	GAR 1.F065 (?) or ACJ-GAR 1.F065	slopes on de-icing/anti-icing pads	recommendation on slopes on de-icing/anti-icing pads	?	missing recommendation in GAR	
3.15.8 to 3.15.10	GAR 1.F065 (g) to (i)	strength of de-icing/anti-icing pads and clearance distances on a de-icing/anti-icing	recommendations on strength of de-icing/anti-icing pads and clearance distances on a de-icing/anti-icing pad	requirements on strength of de-icing/anti-icing pads and clearance distances on a de-icing/anti-icing pad	recommendations become compulsory	
3.15.11	GAR 1.F065 (?) or ACJ-GAR 1.F065	surface drainage of de-icing/anti-icing pads	recommendation on surface drainage of de-icing/anti-icing pads to avoid pollution	?	missing recommendation in GAR (because not directly related to safety?)	
GAR Subpart G	4.1.5	GAR 1.G035 (b)	Inner horizontal surface	"the radius or outer limits of the Inner horizontal surface shall be measured from a reference point or points established for such purpose"	"The outer limits of the inner horizontal surface are defined by circular arcs centred on each runway end joined tangentially by straight lines	GAR is more precise

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Annex chapter 4 - G 4.2.4	GAR 1.G010 (d)	obstacle limitation requirements for non-instrument runways	New objects or extensions of existing objects should not be permitted above the conical surface or inner horizontal surface except when(...) the object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	New objects or extensions of existing objects shall not be permitted above the conical surface or inner horizontal surface except when(...) the object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
	GAR 1.G010 (e)	obstacle limitation requirements for non-instrument runways	Existing objects above any of the surfaces (...) should as far as practicable be removed except when(...) the object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	Existing objects above any of the surfaces (...) shall as far as practicable be removed except when(...) the object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
	GAR 1.G015 (e)	obstacle limitation requirements for non-precision approach runways	New objects or extensions of existing objects should not be permitted above the approach surface beyond 3000 m from the inner edge, the conical surface or inner horizontal surface except when(...) the object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	New objects or extensions of existing objects shall not be permitted above the approach surface beyond 3000 m from the inner edge, the conical surface or inner horizontal surface except when(...) the object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
	GAR 1.G015 (f)	obstacle limitation requirements for non-precision approach runways	Existing objects above any of the surfaces required (...) should as far as practicable be removed except when(...) the object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	Existing objects above any of the surfaces required (...) shall as far as practicable be removed except when(...) the object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory

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4.2.13 (and 4.2.14)	GAR 1.G020(a)	obstacle limitation surface for a cat 1 runway	The following obstacle limitation surfaces shall be established for precision approach runway categories I(...) : (1) Conical surface; (2) Inner horizontal surface; (3) Approach surface and inner approach surface; (4) Transitional surfaces. (recommendation to add : Inner transitional surfaces and balked landing surface.)	The following obstacle limitation surfaces shall be established for precision approach runway categories I(...) : (1) Conical surface; (2) Inner horizontal surface; (3) Approach surface and inner approach surface; (4) Transitional surfaces; (5) Inner transitional surfaces; and (6) Balked landing surface.	a recommendation becomes compulsory : same surface for cat 1 as for cat II or III.
4.2.20	GAR 1.G020(f)	obstacle limitation surface for precision approach rwy :new objects above a conical and inner horizontal surface	New objects or extensions of existing objects should not be permitted above the conical surface and the inner horizontal surface except when(...)an object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	New objects or extensions of existing objects shall not be permitted above the conical surface and the inner horizontal surface except when(...)an object would be shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
4.2.21	GAR 1.G020(g)	obstacle limitation surface for precision approach rwy : existing objects above an approach surface, a conical and inner horizontal surface	Existing objects above an approach surface, a transitional surface, the conical surface and inner horizontal surface shall, as far as practicable, be removed, except when(...) an object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	Existing objects above an approach surface, a transitional surface, the conical surface and inner horizontal surface shall, as far as practicable, be removed, except when(...) an object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety.	a recommendation becomes compulsory
4.2.?	GAR 1.G020(h) ((1) and (2))	obstacle limitation surface for precision approach rwy : OFZ	?	definition and requirements related to OFZ	introduction of a new requirement in GAR about OFZ
4.2.24	GAR 1.G025(c)	obstacle limitation requirements for RWYs meant for take-off	The operational characteristics of aeroplanes for which the runway is intended should be examined to see if it is desirable to reduce the slope (...)when critical operating conditions are to be catered to. If the specified slope is reduced, corresponding adjustment in the length of take-off climb surface should be made so as to provide protection to a height of 300 m.	The operational characteristics of aeroplanes for which the runway is intended shall be examined to see if it is desirable to reduce the slope (...)when critical operating conditions are to be catered to. If the specified slope is reduced, corresponding adjustment in the length of take-off climb surface shall be made so as to provide protection to a height of 300 m.	a recommendation becomes compulsory

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
	4.2.27	GAR 1.G025(e)	obstacle limitation requirements for RWYs meant for take-off	Existing objects that extend above a take-off climb surface should as far as practicable be removed except when,(...)an object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety	Existing objects that extend above a take-off climb surface shall as far as practicable be removed except when,(...)an object is shielded by an existing immovable object, or after an aeronautical study it is determined that the object would not adversely affect the safety	a recommendation becomes compulsory
	4.3 (4.3.1 and 4.3.2)	GAR 1.G080(a) (1) and (2)	objects outside the OLS	recommendation on limitation in height and arrangement for proposed construction outside the OLS	requirement on limitation in height and arrangement for proposed construction outside the OLS	recommendations become compulsory
	4.4 (4.4.1 and 4.4.2)	GAR 1.G080(b) and (c)	other objects	recommendation about the objects which could endanger safety	requirement about the objects which could endanger safety	recommendations become compulsory
Annex 14 chapter 5 ; GAR Subpart J	5.1.1	GAR 1.J001	wind direction indicators (number, location and visibility)	the requirement is at least one direction indicator for an aerodrome	the requirement is " a sufficient number of wind direction indicators" and at least one wind direction indicator visible for an aircraft during approach and before take-off (at least one illuminated for each runway at night)	more wind direction indicators needed in GAR
	5.1.1.3, and 5.1.1.5	GAR 1.J001 (c)	characteristics of wind direction indicators	recommendations on form, composition, colours of wind direction indicators	requirements on form, composition, colours of wind direction indicators	recommendations become compulsory
	5.1.1.4	GAR 1.J001 (c)	characteristics of wind direction indicators	Recommendation on circular band around wind direction indicator	Recommendation on circular band around wind direction indicator	In Section 2
	5.1.2.2	GAR 1.J010 (b) (1)	Form of a landing direction indicator	The landing direction indicator should be in the form of a "T".	The landing direction indicator shall be in the form of a "T".	a recommendation becomes compulsory
	5.1.3.1	GAR 1.J015 (a)	Reuirement for signalling lamp	A signalling lamp shall be provided at a controlled aerodrome in the aerodrome control tower	A signalling lamp shall be provided at a controlled aerodrome in the aerodrome control tower when required for air traffic management reasons.	Clarification of requirement
	5.1.3.2 and 5.1.3.3	GAR 1.J015 (b)	characteristics of a signalling lamp	recommendations on colours and beam spread of a signalling lamp	requirements on colours and beam spread of a signalling lamp	a recommendation becomes compulsory
	5.1.3.2 and 5.1.3.3		Morse Code	Recommendation on capability of transmitting in Morse Code	No Longer in GAR	deleted

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	caracterisation of the difference
5.1.4	GAR 1.J005 (a)	applicability of signal panels and signal areas	guidance is given in manuals and appendices	The inclusion of detailed specifications for a signal area in this section is not intended to imply that one has to be provided. A signal area need to be provided only when it is intended to use visual ground signals to communicate with aircraft in flight.	GAR specifies the use of signal panels and signal areas
5.1.4.1	GAR 1.J005 (b)	Location of signal panels and signal areas	The signal area should be located so as to be visible for all angles of azimuth above an angle of 10° above the horizontal when viewed from a height of 300 m.	The signal area shall be located so as to be visible for all angles of azimuth above an angle of 10° above the horizontal when viewed from a height of 300 m.	a recommendation becomes compulsory
5.1.4.3	GAR 1.J005 (c) (2)	colour of signal panels and signal areas	The colour of the signal area should be chosen to contrast with the colours of the signal panels used, and it should be surrounded by a white border not less than 0.3 m wide.	The colour of the signal area shall be chosen to contrast with the colours of the signal panels used, and it shall be surrounded by a white border not less than 0.3 m wide.	a recommendation becomes compulsory
5.1.4	IEM-GAR 1.J005 <sub>1</sub>	usefulness of signal panels and signal areas	Attachment A, Section 16	A signal panel and signal area may be needed when the aerodrome does not have an aerodrome control tower or an aerodrome flight information service unit, or when the aerodrome is used by aeroplanes not equipped with radio. Visual ground signals may also be useful in the case of failure of two-way radio communication with aircraft. It should be recognized, however, that the type of information which may be conveyed by visual ground signals should normally be available in AIPs or NOTAM. The potential need for visual ground signals should therefore be evaluated before deciding to provide a signal area.	introduction of a new explanation for the use of signal panels and signal areas
5.2.1.2	GAR 1.J055 (b)	interruption of rwy marking : order of importance	recommendation on the order of importance for interrupting the rwy markings	requirement on the order of importance for interrupting the rwy markings	a recommendation becomes compulsory
5.2.1.2	GAR 1.J055 (c)	interruption of rwy marking at intersection of a runway and a taxiway	standard for the interruption of rwy markings at the intersection of a runway and a taxiway	standard for the interruption of rwy markings at the intersection of a runway and a taxiway	rewording

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	caracterisation of the difference
5.2.1.4 to 5.2.1.8	GAR 1.J020 (d)	border for markings	recommendation to outline white runway marking in black where runway surface are with light colour	Where there is insufficient contrast between the marking and the pavement surface, the marking shall include an appropriate border	GAR is more stringent for pavement with insufficient contrast
5.2.2.2		runway designation marking for unpaved RWYs	A runway designation marking should be provided, so far as practicable, at the thresholds of an unpaved runway.	No longer in GAR	Deleted
5.2.2.3 and 5.2.2.6	GAR 1.J025	runway designation marking embedded in threshold marking	runway designation marking embedded in threshold marking	deleted from GAR	deleted
5.2.4.1 and 5.2.4.2	GAR 1.J035 (a) (1)	applicability of threshold markings	threshold markings should normally be provided at the threshold of a paved instrument rwy and of a paved non instrument rwy in special cases (+recommendation for non instrument RWY)	A threshold marking shall be provided at the threshold of a paved runway	GAR asks for threshold markings in more cases than ICAO
5.2.4.3	GAR 1.J035 (a) (2)	applicability of threshold markings	A threshold marking should be provided, so far as practicable, at the thresholds of an unpaved runway.	No longer in GAR	Deleted
5.2.4.6		runway designation marking embedded in threshold marking	runway designation marking embedded in threshold marking	deleted from GAR	deleted
5.2.4.7	GAR 1.J035 (c) (1)	transverse stripes and displayed threshold	Where a threshold is displaced from the extremity of a runway or where the extremity of a runway is not square with the runway centre line, a transverse stripe (...) should be added to the threshold marking.	Where a threshold is displaced from the extremity of a runway or where the extremity of a runway is not square with the runway centre line, a transverse stripe (...) shall be added to the threshold marking.	a recommendation becomes compulsory
5.2.4.? (note 2 after 5.2.4.10)	GAR 1.J035 (d)	threshold marking	note about closed markings which are required when the runway before a threshold is unfit for the surface movement of aircraft,	When the runway before a threshold is unfit for the surface movement of aircraft, chevron markings, (...) shall be provided.	a standard written in a note in Annex 14 becomes clearly compulsory

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.2.5.3	GAR 1.J040 (a) (2)	aiming point marking	An aiming point marking should be provided at each approach end of a paved non-instrument runway where the code number is 3 or 4, and a paved instrument runway where the code number is 1, when additional conspicuity of the aiming point is desirable.	When additional conspicuity of the aiming point is desirable, an aiming point marking shall be provided at each approach end of a paved non-instrument runway where the code number is 3 or 4 and a paved instrument runway where the code number is 1.	a recommendation becomes compulsory
5.2.5.4	GAR 1.J040 (b) (1)	aiming point marking	Lateral spacing between inner side of Aiming point marking for LDA between 1,200 m and 2.400 m 18 - 22.5 m	Lateral spacing between inner side of Aiming point marking for LDA between 1,200 m and 2.400 m 9 - 22.5 m	GAR changes the aiming point marking lateral spacing in this particular case
5.2.6.2	GAR 1.J045 (a) (2)	touchdown zone marking applicability	A touchdown zone marking should be provided in the touchdown zone of a paved non-precision approach or non-instrument runway where the code number is 3 or 4 and additional conspicuity of the touchdown zone is desirable.	A touchdown zone marking shall be provided in the touchdown zone of a paved non-precision approach or non-instrument runway where the code number is 3 or 4 and additional conspicuity of the touchdown zone is desirable.	a recommendation becomes compulsory
5.2.6.4		touchdown zone marking with distance coding (Option B in Figure 5-4)	reference to distance coding in touchdown zone marking	reference to distance coding in touchdown zone marking deleted	reference deleted

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.2.6.5	GAR 1.J045 (c) (3)	touchdown zone marking characteristics for a non precision-approach RWY code 2	On a non-precision approach runway where the code number is 2, an additional pair of touchdown zone marking stripes should be provided 150 m beyond the beginning of the aiming point marking.	On a non-precision approach runway where the code number is 2, an additional pair of touchdown zone marking stripes shall be provided 150 m beyond the beginning of the aiming point marking.	a recommendation becomes compulsory
5.2.7.2	GAR 1.J050 (a) (2)	runway side stripe marking applicability	A runway side stripe marking should be provided on a precision approach runway irrespective of the contrast between the runway edges and the shoulders or the surrounding terrain.	A runway side stripe marking shall be provided on a precision approach runway irrespective of the contrast between the runway edges and the shoulders or the surrounding terrain.	a recommendation becomes compulsory
5.2.7.3, 5.2.7.4 and 5.2.7.5	GAR 1.J050 (b)	location and characteristics of runway side stripe marking	recommendation on location and characteristics of runway side stripe marking	requirement on location and characteristics of runway side stripe marking	recommendations become compulsory
5.2.8.1 (and 5.2.8.2)	GAR 1.J060 (a) (1)	taxiway centreline marking applicability	taxiway centre line marking shall be provided on a paved taxiway, de-icing/anti-icing facility and apron where the code number is 3 or 4 (and recommendation for code 1 or 2)	taxiway centre line marking shall be provided on a paved taxiway, de-icing/anti-icing facility and apron , whatever the code number is	recommendations become compulsory
5.2.8.4, 5.2.8.5, 5.2.8.6 and 5.2.8.7	GAR 1.J060 (b) (1) and (2)	taxiway centreline marking location and characteristics	recommendations on taxiway centreline marking location and characteristics	requirements on taxiway centreline marking location and characteristics	recommendations become compulsory
5.2.1.8	GAR 1.J060 (or GAR 1.J060 (c) )	taxiway centreline marking for unpaved taxiway	An unpaved taxiway should be provided, so far as practicable, with the markings prescribed for paved taxiways	No longer in GAR	Deleted
5.2.9.2, 5.2.9.3, 5.2.9.4, 5.2.9.5, and 5.2.9.6	GAR 1.J065 (b)(1) to (6)	Runway turn pad markings	recommendations on Runway turn pad markings characteristics	requirements on Runway turn pad markings characteristics	recommendations become compulsory
5.2.10.6 and 5.2.10.7	GAR 1.J070 (b) (8) and (9)	Runway holding position markings	recommendations on Runway holding position markings characteristics	requirements on Runway holding position markings characteristics	recommendations become compulsory

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.2.11.1 and 5.2.11.2	GAR 1.J075 (a) (1) and (2)	intermediate holding position markings : applicability	recommendations on the applicability of intermediate holding position markings	requirements on the applicability of intermediate holding position markings	recommendations become compulsory
5.2.12.2	?	site selection of VOR aerodrome checkpoint marking	referring to Annex 10 vol 1 att E		deleted note
5.2.12.5	GAR 1.J080 (c) (2)	VOR aerodrome checkpoint marking characteristics	When it is preferable for an aircraft to be aligned in a specific direction, a line should be provided that passes through the centre of the circle on the desired azimuth. The line should extend 6 m outside the circle in the desired direction of heading and terminate in an arrowhead. The width of the line should be 15 cm	When it is preferable for an aircraft to be aligned in a specific direction, a line shall be provided that passes through the centre of the circle on the desired azimuth. The line shall extend 6 m outside the circle in the desired direction of heading and terminate in an arrowhead. The width of the line shall be 15 cm	a recommendation becomes compulsory
5.2.12.6	GAR 1.J080 (d)	VOR aerodrome checkpoint marking colour	recommendation to have a marking preferably white and which should differ from the colour used for the taxiway markings	requirement to have a marking which shall differ from the colour used for the taxiway markings (and recommendation to have a marking preferably white)	a recommendation becomes compulsory
5.2.13 (5.2.13.1 to 5.2.13.12)	GAR 1.J085	aircraft stand marking	recommendations on aircraft stand marking	requirements on aircraft stand marking	recommendations become compulsory
5.2.14.1	GAR 1.J090 (a)	Apron safety lines : applicability	Apron safety lines should be provided on a paved apron as required by the parking configurations and ground facilities.	Apron safety lines shall be provided on a paved apron as required by the parking configurations and ground facilities.	a recommendation becomes compulsory
5.2.14.3 and 5.2.14.4	GAR 1.J090 (c) (1) and (2)	Apron safety lines : characteristics	Apron safety lines should include such elements as wing tip clearance lines and service road boundary lines as required by the parking configurations and ground facilities. An apron safety line should be continuous in length and at least 10 cm in width.	Apron safety lines shall include such elements as wing tip clearance lines and service road boundary lines as required by the parking configurations and ground facilities. An apron safety line shall be continuous in length and at least 10 cm in width.	a recommendation becomes compulsory
	GAR AMC 1.J095	Marking of road/taxiway intersection		Reference to provision of marking at roadwat/taxiway intersection	additional recommendation

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.2.16.1 and 5.2.16.2	GAR 1.J100 (a)	mandatory instruction marking : applicability	A mandatory marking shall be used to replace a mandatory sign, but where operationally required, such as on taxiways exceeding 60 m in width, a mandatory instruction sign should be supplemented by a mandatory instruction marking.	Where operationally required, such as on taxiways exceeding 60 m in width, a mandatory instruction sign shall be supplemented by a mandatory instruction marking.	a recommendation becomes compulsory, replacing a less extended requirement
5.2.16.4	GAR 1.J100 (b)(2)	mandatory instruction marking : location	Except where operationally required, a mandatory instruction marking should not be located on a runway.	Except where operationally required, a mandatory instruction marking shall not be located on a runway.	a recommendation becomes compulsory
5.2.16.8 and 5.2.16.9	GAR 1.J100 (c)(4) and (5)	mandatory instruction marking : characteristics	The character height should be 4 m. The inscriptions shall be in the form and proportions shown in ICAO Annex 14, Volume 1, Appendix 3. The background should be rectangular and extend a minimum of 0.5 m laterally and vertically beyond the extremities of the inscription.	The character height shall be 4 m. The inscriptions shall be in the form and proportions shown in ICAO Annex 14, Volume 1, Appendix 3. The background shall be rectangular and extend a minimum of 0.5 m laterally and vertically beyond the extremities of the inscription.	a recommendation becomes compulsory
5.2.17.2 and	GAR 1.J105 (a)(2)	information marking applicability	Where operationally required an information sign should be supplemented by an information marking.	Where operationally required an information sign shall be supplemented by an information marking.	a recommendation becomes compulsory
5.2.17.3	GAR 1.J105 (b)	information marking location	An information (location/direction) marking should be displayed prior to and following complex taxiway intersections and where operational experience has indicated the addition of a taxiway location marking could assist flight crew ground navigation.	An information (location/direction) marking shall be displayed prior to and following complex taxiway intersections and where operational experience has indicated the addition of a taxiway location marking could assist flight crew ground navigation.	a recommendation becomes compulsory

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.2.17.8	GAR 1.J105 (c)(3)	information marking characteristics	The character height should be 4 m. The inscriptions should be in the form and proportions shown	The character height shall be 4 m. The inscriptions shall be in the form and proportions shown	a recommendation becomes compulsory
5.3.1.1 to 5.3.1.3	GAR 1.J110 (a) (b) (c)	lights general : lights which may endanger aircrafts, laser emissions, lights which may cause confusion	standards and recommendations about lights which may endanger aircrafts, laser emissions, lights which may cause confusion	?	missing requirements and recommendations in GAR
5.3.1.9	GAR 1.J110 (c) (2)	surface lights	The temperature produced by conduction or radiation at the interface between an installed inset light and an aircraft tire should not exceed 160°C during a 10-minute period of exposure.	The temperature produced by conduction or radiation at the interface between an installed inset light and an aircraft tire shall not exceed 160°C during a 10-minute period of exposure.	a recommendation becomes compulsory
5.3.2 (5.3.2.1, 5.3.2.2 and 5.3.2.3)	?	Emergency lighting	recommendations about emergency lighting (applicability, configuration and colour)	?	missing recommendations in GAR about emergency lighting

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.3.5	GAR 1.J115 (b) (2)(ii)	aerodrome beacon location	The location of the beacon should be such that the beacon is not shielded by objects in significant directions and does not dazzle a pilot approaching to land.	The location of the beacon shall be such that the beacon is not shielded by objects in significant directions and does not dazzle a pilot approaching to land.	a recommendation becomes compulsory
5.3.3.10	GAR 1.J115 (c) (2)(ii)	identification beacon location	The location of the beacon should be such that the beacon is not shielded by objects in significant directions and does not dazzle a pilot approaching to land.	The location of the beacon shall be such that the beacon is not shielded by objects in significant directions and does not dazzle a pilot approaching to land.	a recommendation becomes compulsory
5.3.3.14	GAR 1.J115 (c) (3)(iv)	identification beacon characteristics	The speed of transmission should be between six and eight words per minute, the corresponding range of duration of the Morse dots being from 0.15 to 0.2 seconds per dot.	The speed of transmission shall be between six and eight words per minute, the corresponding range of duration of the Morse dots being from 0.15 to 0.2 seconds per dot.	a recommendation becomes compulsory
5.3.4.1	GAR 1.J120 (a) (b)(c) (d) and AMC 1.J120	Approach lighting system : general and applicability	<u>where practicable</u> , a simple approach lighting system <u>should</u> be applicable to a non instrument RWY (recommendation) and shall be applicable to a non precision RWY (standard). <u>Where applicable</u> , a precision RWY cat I (II or III) approach lighting system shall be provided for a precision RWY cat I (II or III).	The simple approach lighting system details moved to AMC. A precision RWY cat I (II or III) approach lighting system shall be provided for a precision RWY cat I (II or III).	Simple approach lighting becomes an AMC and recommendations and soft standards for Precision Approach Lighting become requirements
5.3.4.3	GAR AMC 1.J120	Simple approach lighting system	"the lights forming the crossbar shall be as nearly as practicable in a horizontal straight line"	Now in AMC	AMC only
5.3.4.5 (and 5.3.4.2)	GAR AMC 1.J120	Simple approach lighting system : extension of the centre line lightings	recommendation if it is not possible to provide a centre line sufficiently extending	Now in AMC	AMC only

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.4.13	GAR AMC 1.J125	Reference to light system being in the horizontal plane	The system shall lie as nearly as practicable in the horizontal plane passing through the threshold,	Now in AMC	AMC
5.3.4.10 to 5.3.4.21	GAR 1.J125	Precision approach cat I lighting system	notes	?	no notes extracted from Annex 14 in GAR
5.3.4.17	GAR AMC 1.J125	Precision approach cat I lighting system: characteristics	If the centre line consists of barrettes (...) each barrette should be supplemented by a capacitor discharge light, except where such lighting is considered unnecessary taking into account the characteristics of the system and the nature of the meteorological conditions	Moved to AMC	Moved to AMC
5.3.4.29	GAR AMC 1.J130	Reference to light system being in the horizontal plane	The system shall lie as nearly as practicable in the horizontal plane passing through the threshold,	Now in AMC	AMC
5.3.4.22 to 5.3.4.39	GAR 1.J130	Precision approach cat II or III lighting system	notes	?	no notes extracted from Annex 14 in GAR
5.3.4.34	GAR AMC 1.J130	Precision approach cat II or III lighting system : centre line lights beyond 300m from the threshold	If the centre line beyond 300 m from the threshold consists of barrettes (...) each barrette beyond 300 m should be supplemented by a capacitor discharge light, except where such lighting is considered unnecessary taking into account the characteristics of the system and the nature of the meteorological conditions.	Moved to AMC	Moved to AMC
5.3.5.1 to 5.3.5.40	GAR 1.J135 to GAR 1.J155	Visual approach slope indicator, PAPI, APAPI, T-VASIS, AT-VASIS	notes	?	no notes extracted from Annex 14 in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.5.1 to 5.3.5.45	GAR 1.J135 to GAR 1.J160	Visual approach slope indicator, PAPI, APAPI, T-VASIS, AT-VASIS	All references to T-VASIS and AT-VASIS	All references to T-VASIS and AT-VASIS deleted	All references to T-VASIS and AT-VASIS deleted
5.3.5.5	GAR 1.J135 (e)	Visual approach slope indicator : general	Where a runway threshold is temporarily displaced from the normal position and one or more of the conditions specified (...) exist, a PAPI should be provided except that where the code number is 1 or 2 an APAPI may be provided	Where a runway threshold is temporarily displaced from the normal position and one or more of the conditions specified (...) exist, a PAPI shall be provided except that where the code number is 1 or 2 a PAPI or APAPI may be provided	a recommendation becomes compulsory
5.3.6	GAR 1.J165 (a) (b) (c)	Circling guidance lights	recommendations on applicability, location and characteristics of circling guidance lights	requirements on applicability, location and characteristics of circling guidance lights	recommendations become compulsory
5.3.7	GAR 1.J170 (a) (b) (c)	Runway lead-in lighting system	recommendations on applicability, location and characteristics of runway lead-in lighting system	requirements on applicability, location and characteristics of runway lead-in lighting system	recommendations become compulsory
5.3.8.1	GAR 1.J175 (b)	Runway threshold identification lights	recommendations on applicability of runway threshold identification lights	requirements on applicability of runway threshold identification lights	a recommendation becomes compulsory

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.8.3	GAR 1.J175 (c) (1)	Runway threshold identification lights	Runway threshold identification lights should be flashing white lights with a flash frequency between 60 and 120 per minute.	Runway threshold identification lights shall be flashing white lights with a flash frequency between 60 and 120 per minute.	a recommendation becomes compulsory
5.3.9.2	GAR 1.J180 (a) (2)	Runway edge lights: applicability	Runway edge lights should be provided on a runway intended for take-off with an operating minimum below an RVR of the order of 800 m by day.	Runway edge lights shall be provided on a runway intended for take-off with an operating minimum below an RVR of the order of 800 m by day.	a recommendation becomes compulsory
5.3.9.5	GAR 1.J180 (b) (3)	Runway edge lights: location and positioning	Where the width of the area which could be declared as runway exceeds 60 m, the distance between the rows of lights should be determined taking into account the nature of the operations, the light distribution characteristics of the runway edge lights, and other visual aids serving the runway.	Where the width of the area which could be declared as runway exceeds 60 m, the distance between the rows of lights shall be determined taking into account the nature of the operations, the light distribution characteristics of the runway edge lights, and other visual aids serving the runway.	a recommendation becomes compulsory
5.3.10.5	GAR 1.J185 (b) (4)	Runway threshold and wing bar lights	The lights prescribed (...) should be either equally spaced between the rows of runway edge lights; or symmetrically disposed about the runway centre line in two groups, with the lights uniformly spaced in each group and with a gap between the groups equal to the gauge of the touchdown zone marking or lighting, where such is provided, or otherwise not more than half the distance between the rows of runway edge lights.	The lights prescribed (...) shall be either equally spaced between the rows of runway edge lights; or symmetrically disposed about the runway centre line in two groups, with the lights uniformly spaced in each group and with a gap between the groups equal to the gauge of the touchdown zone marking or lighting, where such is provided, or otherwise not more than half the distance between the rows of runway edge lights.	a recommendation becomes compulsory
5.3.10.6	GAR 1.J185 (c) (1)	Runway threshold and wing bar lights	Wing bar lights should be provided on a precision approach runway when additional conspicuity is considered desirable.	Wing bar lights shall be provided on a precision approach runway when additional conspicuity is considered desirable.	a recommendation becomes compulsory

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.11.3	GAR 1.J190 (b) (2) and (3)	Runway end lights	Runway end lighting shall consist of at least six lights. The lights should be either equally spaced between the rows of runway edge lights; or symmetrically disposed about the runway centre line in two groups with the lights uniformly spaced in each group and with a gap between the groups of not more than half the distance between the rows of runway edge lights. For a precision approach runway category III, the spacing between runway end lights, except between the two innermost lights if a gap is used, shall not exceed 6 m.	Runway end lighting shall consist of at least six lights. The lights shall be either equally spaced between the rows of runway edge lights; or symmetrically disposed about the runway centre line in two groups with the lights uniformly spaced in each group and with a gap between the groups of not more than half the distance between the rows of runway edge lights. For a precision approach runway category III, the spacing between runway end lights, except between the two innermost lights if a gap is used, shall not exceed 6 m.	a recommendation becomes requirement
5.3.12.2	GAR 1.J195 (a) (2)	Runway centre line lights	Runway centre line lights should be provided on a precision approach runway category I, particularly when the runway is used by aircraft with high landing speeds or where the width between the runway edge lights is greater than 50 m.	Runway centre line lights shall be provided on a precision approach runway category I, particularly when the runway is used by aircraft with high landing speeds or where the width between the runway edge lights is greater than 50 m.	a recommendation becomes requirement
5.3.12.6	GAR 1.J195 (d) and (e)	Runway centre line lights	recommendation on centre line guidance for take-off	requirement on centre line guidance for take-off	a recommendation becomes requirement
5.3.13.4	GAR 1.J200 (c) (2)	Runway touchdown zone lights : characteristics	A barrette should be not less than 3 m nor more than 4.5 m in length.	A barrette shall be not less than 3 m nor more than 4.5 m in length.	a recommendation becomes requirement
5.3.14.1	GAR AMC 1.J205	Rapid exit taxiway indicator lights	Rapid exit taxiway indicator lights should be provided on a runway intended for use in runway visual range conditions less than a value of 350 m and/or where the traffic density is heavy.	Rapid exit taxiway indicator lights shall be provided on a runway intended for use in runway visual range conditions less than a value of 350 m and/or where the traffic density is heavy.	a recommendation becomes requirement
5.3.14.7	GAR 1.J205 (c) (3)	Rapid exit taxiway indicator lights	Rapid exit taxiway indicator lights should be supplied with power on a separate circuit to other runway lighting so that they may be used when other lighting is switched off.	AMC	AMC
5.3.16.2	GAR 1.J210 (a) (2)	taxiway centre line lights	Taxiway centre line lights should be provided on a taxiway intended for use at night in runway visual range conditions of 350 m or greater, and particularly on complex taxiway intersections and exit taxiways, except that these lights need not be provided (...)	Taxiway centre line lights shall be provided on a taxiway intended for use at night in runway visual range conditions of 350 m or greater, and particularly on complex taxiway intersections and exit taxiways, except that these lights need not be provided (...)	a recommendation becomes requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.16.3	GAR 1.J210 (a) (3)	taxiway centre line lights	Taxiway centre line lights should be provided on an exit taxiway, taxiway, de-icing/antiicing facility and apron in all visibility conditions where specified as components of an advanced surface movement guidance and control system in such a manner as to provide continuous guidance between the runway centre line and aircraft stands.	Taxiway centre line lights shall be provided on an exit taxiway, taxiway, de-icing/antiicing facility and apron in all visibility conditions where specified as components of an advanced surface movement guidance and control system in such a manner as to provide continuous guidance between the runway centre line and aircraft stands.	a recommendation becomes requirement
5.3.16.5	GAR 1.J210 (a) (5)	taxiway centre line lights	Taxiway centre line lights should be provided in all visibility conditions on a runway forming part of a standard taxi-route where specified as components of an advanced surface movement guidance and control system.	Taxiway centre line lights shall be provided in all visibility conditions on a runway forming part of a standard taxi-route where specified as components of an advanced surface movement guidance and control system.	a recommendation becomes requirement
5.3.16.9 and 5.3.16.10	GAR 1.J210 (b)(4)and (5)	taxiway centre line lights characteristics	recommendations on characteristics of taxiway centre line lights where higher intensities are required and where they are part of a SMGC system.	requirements on characteristics of taxiway centre line lights where higher intensities are required and where they are part of a SMGC system.	recommendations become requirement
5.3.16.12 to 5.3.16.19	Appendix to GAR 1.J220	taxiway centre line lights positioning on taxiways, rapid exit taxiways and other exit taxiways	recommendations on taxiway centre line lights positioning on taxiways, rapid exit taxiways and other exit taxiways	requirements on taxiway centre line lights positioning on taxiways, rapid exit taxiways and other exit taxiways	recommendations become requirement
5.3.17.3 to 5.3.17.6	GAR 1.J225 (b) (1) (2) (3) and (4)	Taxiway edge lights location	recommendations on how to position taxiway edge lights	requirements on how to position taxiway edge lights	recommendations become requirement
5.3.18.2	GAR 1.J230 (a) (2)	Runway turn pad light	Runway turn pad lights should be provided on a runway turn pad intended for use at night.	Runway turn pad lights shall be provided on a runway turn pad intended for use at night.	a recommendation becomes requirement
5.3.18.3, 5.3.18.4 and 5.3.18.5	GAR 1.J230 (b) (1) (2) and (3)	Runway turn pad lights location	recommendations on runway turn pad lights location	requirements on runway turn pad lights location	recommendations become requirement
5.3.19.3 and 5.3.19.4	GAR 1.J235 (a) (3) and (4)	Stop bars applicability	A stop bar should be provided at an intermediate holding position when it is desired to supplement markings with lights and to provide traffic control by visual means. Where the normal stop bar lights might be obscured (from a pilot's view),(...) a pair of elevated lights should be added to each end of the stop bar	A stop bar shall be provided at an intermediate holding position when it is desired to supplement markings with lights and to provide traffic control by visual means. Where the normal stop bar lights might be obscured (from a pilot's view),(...) a pair of elevated lights shall be added to each end of the stop bar	recommendations become requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.19.11	GAR 1.J235 (c) (6) and (7)	Stop bars characteristics	Where stop bars are specified as components of an advanced SMGC system and where, from an operational point of view, higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights should be in accordance with the specifications of ICAO Annex 14, Volume 1, Appendix 2, Figure A2-17, A2-18 or A2-19. High-intensity stop bars should only be used in case of an absolute necessity and following a specific study	Where stop bars are specified as components of an advanced SMGC system and where, from an operational point of view, higher intensities are required to maintain ground movements at a certain speed in very low visibilities or in bright daytime conditions, the intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications of ICAO Annex 14, Volume 1, Appendix 2, Figure A2-17, A2-18 or A2-19. High-intensity stop bars shall only be used in case of an absolute necessity and following a specific study	recommendations become requirement
5.3.19.12	GAR 1.J235 (c) (7)	Stop bars characteristics	Where a wide beam fixture is required, the intensity in red light and beam spreads of stop bar lights should be in accordance with the specifications of ICAO Annex 14, Volume 1, Appendix 2, Figure A2-17 or A2-19.	Where a wide beam fixture is required, the intensity in red light and beam spreads of stop bar lights shall be in accordance with the specifications of ICAO Annex 14, Volume 1, Appendix 2, Figure A2-17 or A2-19.	a recommendation becomes requirement
5.3.20.2	GAR 1.J240 (a) (2)	Intermediate holding position lights	Intermediate holding position lights should be provided at an intermediate holding position where there is no need for stop-and-go signals as provided by a stop bar.	Intermediate holding position lights shall be provided at an intermediate holding position where there is no need for stop-and-go signals as provided by a stop bar.	a recommendation becomes requirement
5.3.21.1	GAR 1.J245 (a)	De-icing/anti-icing facility exit lights	De-icing/anti-icing facility exit lights should be provided at the exit boundary of a remote de-icing/anti-icing facility adjoining a taxiway.	De-icing/anti-icing facility exit lights shall be provided at the exit boundary of a remote de-icing/anti-icing facility adjoining a taxiway.	a recommendation becomes requirement
5.2.22.2	GAR 1.J250 (a) (2)	Runway guard lights	Runway guard lights, Configuration A, should be provided at each taxiway/runway intersection associated with a runway intended for use in runway visual range conditions of values less than a value of 550 m where a stop bar is installed; and runway visual range conditions of values between 550 m and 1 200 m where the traffic density is medium or light.	Runway guard lights, Configuration A, shall be provided at each taxiway/runway intersection associated with a runway intended for use in runway visual range conditions of values less than a value of 550 m where a stop bar is installed; and runway visual range conditions of values between 550 m and 1 200 m where the traffic density is medium or light.	a recommendation becomes requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.2.22.3	GAR 1.J250 (a) (3)	Runway guard lights	Runway guard lights, Configuration A or Configuration B or both, should be provided at each taxiway/runway intersection where enhanced conspicuity of the taxiway/runway intersection is needed, such as on a wide-throat taxiway, except that Configuration B shall not be collocated with a stop bar.	Runway guard lights, Configuration A or Configuration B or both, shall be provided at each taxiway/runway intersection where enhanced conspicuity of the taxiway/runway intersection is needed, such as on a wide-throat taxiway, except that Configuration B shall not be collocated with a stop bar.	a recommendation becomes requirement
5.3.22.7	GAR 1.J250 (c) (2)	Runway guard lights	Where there is a need to enhance the contrast between the on and off state of runway guard lights, Configuration A, intended for use during the day, a visor of sufficient size to prevent sunlight from entering the lens without interfering with the function of the fixture should be located above each lamp.	Where there is a need to enhance the contrast between the on and off state of runway guard lights, Configuration A, intended for use during the day, a visor of sufficient size to prevent sunlight from entering the lens without interfering with the function of the fixture shall be located above each lamp.	a recommendation becomes requirement
5.3.22.10 to 5.3.22.15	GAR 1.J250 (c) (5) to (10)	Runway guard lights characteristics	recommendations on intensity of yellow lights and beam spread of lights in configuration A and B according to the context	requirements on intensity of yellow lights and beam spread of lights in configuration A and B according to the context	recommendations become requirement
5.3.23.1	GAR 1.J255 (a)	Apron floodlighting: applicability	Apron floodlighting should be provided on an apron, on a de-icing/anti-icing facility and on a designated isolated aircraft parking position intended to be used at night	Apron floodlighting shall be provided on an apron, on a de-icing/anti-icing facility and on a designated isolated aircraft parking position intended to be used at night	a recommendation becomes requirement
5.3.23.2	GAR 1.J255 (b)	Apron floodlighting: location	Apron floodlights should be located so as to provide adequate illumination on all apron service areas, with a minimum of glare to pilots of aircraft in flight and on the ground, aerodrome and apron controllers, and personnel on the apron. The arrangement and aiming of floodlights should be such that an aircraft stand receives light from two or more directions to minimize shadows.	Apron floodlights shall be located so as to provide adequate illumination on all apron service areas, with a minimum of glare to pilots of aircraft in flight and on the ground, aerodrome and apron controllers, and personnel on the apron. The arrangement and aiming of floodlights shall be such that an aircraft stand receives light from two or more directions to minimize shadows.	a recommendation becomes requirement
5.3.23.4	GAR 1.J255 (c) (2)	Apron floodlighting: average illuminance	recommendations on the average illuminance for aircraft stand and other apron area	requirements on the average illuminance for aircraft stand and other apron area	a recommendation becomes requirement
5.3.24.8	GAR 1.J260 (b) (5)	visual docking guidance system characteristics	The system should be usable by all types of aircraft for which the aircraft stand is intended, preferably without selective operation.	The system shall be usable by all types of aircraft for which the aircraft stand is intended	a recommendation becomes requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	caracterisation of the difference
5.3.24.11 (and 5.3.24.10)	Appendix to GAR 1.J260 (a) (1) and (2)	visual docking guidance system : azimuth guidance unit	requirement for the azimuth guidance unit to be used by at least the left seat (and recommended for use by the left and the right seats)	requirement for the azimuth guidance unit to be used by both the left and the right seats	a recommendation becomes requirement, replacing a former requirement
5.3.24.16 (and 5.3.24.15)	Appendix to GAR 1.J260(b) (2) and (3)	visual docking guidance system : stopping position indicator	requirement for the stopping position indicator to be used by at least the left seat (and recommended for use by the left and the right seats)	requirement for the stopping position indicator to be used by both the left and the right seats	a recommendation becomes requirement, replacing a former requirement
5.3.24.19	Appendix to GAR 1.J260(b) (6)	visual docking guidance system : stopping position indicator	The stopping position indicator should provide closing rate information over a distance of at least 10 m.	The stopping position indicator shall provide closing rate information over a distance of at least 10 m.	a recommendation becomes requirement
5.3.25.1	GAR 1.J265 (a)	Aircraft stand manoeuvring guidance lights : applicability	Aircraft stand manoeuvring guidance lights should be provided to facilitate the positioning of an aircraft on an aircraft stand on a paved apron or on a de-icing/anti-icing facility intended for use in poor visibility conditions, unless adequate guidance is provided by other means.	Aircraft stand manoeuvring guidance lights shall be provided to facilitate the positioning of an aircraft on an aircraft stand on a paved apron or on a de-icing/anti-icing facility intended for use in poor visibility conditions, unless adequate guidance is provided by other means.	a recommendation becomes requirement
5.3.25.4	GAR 1.J265 (b) (3)	Aircraft stand manoeuvring guidance lights: characteristics	The lights used to delineate lead-in, turning and lead-out lines should be spaced at intervals of not more than 7.5 m on curves and 15 m on straight sections.	The lights used to delineate lead-in, turning and lead-out lines shall be spaced at intervals of not more than 7.5 m on curves and 15 m on straight sections.	a recommendation becomes requirement
5.3.25.6 and 5.3.25.7	GAR 1.J265 (b) (5) and (6)	Aircraft stand manoeuvring guidance lights: characteristics	recommendation about the intensity of the light which should be adequate with the visibility and about the lighting circuit which should be designed to be able to be switched on and off alternately	requirement about the intensity of the light which shall be adequate with the visibility and about the lighting circuit which shall be designed to be able to be switched on and off alternately	recommendations become requirement
5.3.26.2 (and 5.3.26.1)	GAR 1.J270 (a) (2) (and (1))	Road holding position lights : applicability	requirement for the road holding position lights to be used for RVR <350 m (and recommendation for use for RVR<550m)	requirement for the road holding position lights to be used for RVR <550m	a recommendation becomes requirement, replacing a former requirement
note after 5.3.26.4	GAR 1.J270 (c) (2) (and (1))	Road holding position lights : characteristics	the (controllable red/green traffic) lights should be controlled by the air traffic services.	the (controllable red/green traffic) lights shall be controlled by the air traffic services.	a recommendation (note) becomes requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.3.26.4 (b)	GAR 1.J270 (b) (1) (ii)	Road holding position lights Alternative to red/green traffic light	a flashing red light	runway guard lights	different colour lights specified
5.3.26/7	GAR 1.J270 (c) (5)	Specification for runway guard light	the flash frequency of the flashing red light shall be between 30 and 60 per minute	Where provided the runway guard lights shall be illuminated between 30 and 60 cycles per minute and the light suppression and illumination periods shall be equal and opposite in each light	specification changed
5.4.2.6	GAR 1.J280(a) (6)	general about mandatory instruction signs	A runway designation sign at a taxiway/runway intersection should be supplemented with a location sign in the outboard (farthest from the taxiway) position, as appropriate.	A runway designation sign at a taxiway/runway intersection shall be supplemented with a location sign in the outboard (farthest from the taxiway) position, as appropriate.	a recommendation becomes requirement
5.4.3.5 and 5.4.3.6	GAR 1.J285(a) (5) and (6)	Information signs : applicability	An intersection take-off sign should be provided when there is an operational need to indicate the remaining take-off run available (TORA) for intersection take-offs. Where necessary, a destination sign should be provided to indicate the direction to a specific destination on the aerodrome (...)	(5) An intersection take-off sign shall be provided when there is an operational need to indicate the remaining take-off run available (TORA) for intersection take-offs. (6) Where necessary, a destination sign shall be provided to indicate the direction to a specific destination on the aerodrome (...)	recommendations become requirement
5.4.3.9	GAR 1.J285(a) (9)	Information signs : applicability	A location sign should be provided at an intermediate holding position.	A location sign shall be provided at an intermediate holding position.	a recommendation becomes requirement
5.4.3.12 and 5.4.3.13	GAR 1.J285(a) (12) and (13)	Information signs : applicability	Wherever necessary, a location sign should be provided to identify taxiways exiting an apron or taxiways beyond an intersection. Where a taxiway ends at an intersection such as a "T" and it is necessary to identify this, a barricade, direction sign and/or other appropriate visual aid should be used.	Wherever necessary, a location sign shall be provided to identify taxiways exiting an apron or taxiways beyond an intersection. Where a taxiway ends at an intersection such as a "T" and it is necessary to identify this, a barricade, direction sign and/or other appropriate visual aid shall be used.	recommendations become requirement
5.4.3.22	GAR 1.J285(b) (9)	Information signs : location	Whenever practicable a destination sign should not be collocated with a location or direction sign.	Whenever practicable a destination sign shall not be collocated with a location or direction sign.	a recommendation becomes requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.4.3.24	GAR 1.J285(b) (11)	Information signs : location	A direction sign, barricade and/or other appropriate visual aid used to identify a "T" intersection should be located on the opposite side of the intersection facing the taxiway.	A direction sign, barricade and/or other appropriate visual aid used to identify a "T" intersection shall be located on the opposite side of the intersection facing the taxiway.	a recommendation becomes requirement
5.4.3.33	GAR 1.J285(c) (9)	Information signs : characteristics	Where it is necessary to identify each of a series of intermediate holding positions on the same taxiway, the location sign should consist of the taxiway designation and a progressive number.	Where it is necessary to identify each of a series of intermediate holding positions on the same taxiway, the location sign shall consist of the taxiway designation and a progressive number.	a recommendation becomes requirement
5.4.3.36	GAR 1.J285(c) (12)	Information signs : characteristics	When designating taxiways, the use of the letters I, O or X and the use of words such as inner and outer should be avoided wherever possible to avoid confusion with the numerals 1, 0 and closed marking.	When designating taxiways, the use of the letters I, O or X and the use of words such as inner and outer shall be avoided wherever possible to avoid confusion with the numerals 1, 0 and closed marking.	a recommendation becomes requirement
5.4.4.4	GAR 1.J290(c) (2)	VOR aerodrome check-point sign : inscriptions on the sign	recommendations on how to give indications on a VOR aerodrome check-point sign	requirements on how to give indications on a VOR aerodrome check-point sign	a recommendation becomes requirement
5.4.5.1 to 5.4.5.5		Aerodrome identification sign	An aerodrome identification sign should be provided at an aerodrome where there is insufficient alternative means of visual identification	deleted	deleted
5.4.6 (5.4.6.1, 5.4.6.2 and 5.4.6.3)	GAR 1.J300 (a) (b) (c)	Aircraft stand identification sign	recommendations on aircraft stand identification signs about applicability, location and colour of inscription	requirements on aircraft stand identification signs about applicability, location and colour of inscription	recommendations become requirement
5.4.7.2 to 5.4.7.5	GAR AMC 1.J305	Road-holding position sign	Specification for road-holding position sign	Specification for road-holding position sign moved into AMC and provision for a yield sign at a road/taxiway intersection included	AMC

**Differences between ICAO annex 14 and GAR**

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
5.5.2 (5.5.2.1, 5.5.2.2 and 5.5.2.3)	GAR 1.J315 (a) (b) (c)	Unpaved runway edge markers	recommendations on unpaved runway edge markers about applicability, positioning and dimensions	requirements on unpaved runway edge markers about applicability, positioning and dimensions	recommendations become requirement
5.5.3.1	GAR 1.J320 (a)	Stopway edge markers	Stopway edge markers should be provided when the extent of a stopway is not clearly indicated by its appearance compared with that of the surrounding ground.	Stopway edge markers shall be provided when the extent of a stopway is not clearly indicated by its appearance compared with that of the surrounding ground.	a recommendation becomes requirement
5.5.4 (5.5.4.1, 5.5.4.2 and 5.5.4.3)	GAR 1.J325 (a) (b) (c)	Edge markers for snow-covered runways	recommendations on edge markers for snow-covered runways about applicability, positioning and dimensions	requirements on edge markers for snow-covered runways about applicability, positioning and dimensions	recommendations become requirement
5.5.5.1	GAR 1.J330 (a)	Taxiway edge markers: applicability	Taxiway edge markers should be provided on a taxiway where the code number is 1 or 2 and taxiway centre line or edge lights or taxiway centre line markers are not provided.	Taxiway edge markers shall be provided on a taxiway where the code number is 1 or 2 and taxiway centre line or edge lights or taxiway centre line markers are not provided.	a recommendation becomes requirement
5.5.5.2	GAR 1.J330 (b)	Taxiway edge markers location	Taxiway edge markers should be installed at least at the same locations as would the taxiway edge lights had they been used.	Taxiway edge markers shall be installed at least at the same locations as would the taxiway edge lights had they been used.	a recommendation becomes requirement
5.5.5.4	GAR 1.J330 (c) (2)	Taxiway edge markers characteristics	The marked surface as viewed by the pilot should be a rectangle and shall have a minimum viewing area of 150 cm <sup>2</sup> .	The marked surface as viewed by the pilot shall be a rectangle and shall have a minimum viewing area of 150 cm <sup>2</sup> .	a recommendation becomes requirement
5.5.6.1 to 5.5.6.4	GAR 1.J335 (a) and (b)	Taxiway centre line markers applicability and location	recommendations on applicability and location of taxiway centre line markers	requirements on applicability and location of taxiway centre line markers	recommendations become requirement
5.5.6.6	GAR 1.J335 (c) (2)	Taxiway centre line markers characteristics	The marked surface as viewed by the pilot should be a rectangle and shall have a minimum viewing area of 20 cm <sup>2</sup> .	The marked surface as viewed by the pilot shall be a rectangle and shall have a minimum viewing area of 20 cm <sup>2</sup> .	a recommendation becomes requirement
5.5.7 (5.5.7.1 and 5.5.7.2)	GAR 1.J340 (a) (b)	Unpaved taxiway edge markers	recommendations on applicability and characteristics of unpaved taxiway edge markers	requirements on applicability and characteristics of unpaved taxiway edge markers	recommendations become requirement

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
	5.5.8.1 to 5.5.8.3		Boundary markers	Boundary markers specification, etc.	Deleted	Deleted
Annex 14 chapter 6 - GAR Subpart H	6.1.1	GAR 1.H005	obstacles that extend above a take-off climb surface	recommendation to mark (and light when used at night) fixed obstacles that extend above take-off climb surface <u>within 3000 m</u> of the inner edge of the take-off climb surface	requirement to mark (and light when used at night) <u>all</u> fixed obstacles that extend above take-off climb surface	a recommendation is turned into a more stringent requirement
	6.1.3	GAR 1.H005	obstacles that extend above an approach or transitional surface	requirement to mark (and light when used at night) fixed obstacles that extend above an approach or transitional surface <u>within 3000 m</u> of the inner edge of the approach b surface	requirement to mark (and light when used at night) all fixed obstacles that extend above an approach or transitional surface	more stringent requirement in GAR
	6.1.4	GAR 1.H010	obstacles that extend above a horizontal surface	recommendation to mark (and light when used at night) fixed obstacles that extend above a horizontal surface	requirement to mark (and light when used at night) fixed obstacles that extend above a horizontal surface	a recommendation becomes requirement
	6.1.?	GAR 1.H010	obstacles that extend above a conical surface	?	requirement to mark (and light when used at night) fixed obstacles that extend above a conical surface	new requirement in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
6.1.7 or 1.1	GAR 1.H001 (b)	definition of an obstacle	Obstacle: All fixed (whether temporary or permanent) and mobile objects, or part thereof, that are located on an area intended for the surface movement of aircraft, or that extent above a define surface intended to protect aircraft in flight	All fixed and mobile objects penetrating obstacle limitation surfaces and other objects that could influence an aerodrome operation safety shall be considered as obstacles (...)	subjective definition of obstacle in GAR ("could influence" is not precise), broader than in Annex 14.
6.1.6	ACJ-GAR 1.H020 2	vehicles and mobile objects	Vehicles and other mobile objects, excluding aircraft, on the movement area of an aerodrome are obstacles and shall be marked and, if the vehicles and aerodrome are used at night or in conditions of low visibility, lighted, except that aircraft servicing equipment and vehicles used only on aprons may be exempt.	Vehicles and other mobile objects, excluding aircraft, on the movement area of an aerodrome are obstacles and should be marked and, if the vehicles and aerodrome are used at night or in conditions of low visibility, lighted, except that aircraft servicing equipment and vehicles used only on aprons may be exempt.	a standard in Annex 14 becomes an advisory material (section 2 material in GAR)
6.1.7	ACJ-GAR 1.H020 3	Elevated aeronautical ground lights	Elevated aeronautical ground lights within the movement area shall be marked so as to be conspicuous by day. Obstacle lights shall not be installed on elevated ground lights or signs in the movement area.	Elevated aeronautical ground lights within the movement area should be marked so as to be conspicuous by day. Obstacle lights should not be installed on elevated ground lights or signs in the movement area.	a standard in Annex 14 becomes an advisory material (section 2 material in GAR)
6.1.8	ACJ-GAR 1.H020 4	Obstacles near taxiways	All obstacles within the distance specified in the table (...) from the centre line of a taxiway, an apron taxiway or aircraft stand taxilane shall be marked and, if the taxiway, apron taxiway or aircraft stand taxilane is used at night, lighted.	All obstacles within the distance specified in the following table from the centre line of a taxiway, an apron taxiway or aircraft stand taxilane should be marked and, if the taxiway, apron taxiway or aircraft stand taxilane is used at night, lighted.	a standard in Annex 14 becomes an advisory material (section 2 material in GAR)
6.1.9	GAR 1.H020	other object on or near aerodrome ("anything which may endanger aeroplane on the movement area or in the air within OLS")	anything which may endanger aeroplane on the movement area or in the air within OLS should be marked and lighted, except that the marking may be omitted when the obstacle is lighted by high intensity obstacle lights by day	Other objects that could influence an aerodrome operation safety and regularity shall be considered as obstacles and marked and if the aerodrome is used at night lighted.	a recommendation is turned into a more stringent requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	caracterisation of the difference
6.1.10 and 6.1.11	?	marking and lighting of obstacles such as overhead wires, cables, etc. within the OLS	Overhead wires, cables, etc., crossing a river, valley or highway should be marked and their supporting towers marked and lighted if an aeronautical study indicates that the wires or cables could constitute a hazard to aircraft, except that the marking of the supporting towers may be omitted when they are lighted by high-intensity obstacle lights by day. When it has been determined that an overhead wire, cable, etc., needs to be marked but it is not practicable to install markers on the wire, cable, etc., then high-intensity obstacle lights, Type B, should be provided on their supporting towers.	?	missing recommendations in GAR about marking and lighting of obstacles such as overhead wires, cables, etc. within the OLS
6.2.3, 6.2.4 and 6.2.5	GAR 1.H030 (b), (c) and (e)	use of colour for the marking of objects	recommendations on the use of colour for the marking of objects	requirements on the use of colour for the marking of objects	recommendations become requirements in GAR
Appendix 1 to annex 14 3.2	GAR 1.H030 (a)	use of ordinary colour for the marking of objects : chromaticity factors	recommendations on chromaticity factors for marking colours (and definitions of chromaticity boundaries for colours)	requirement on chromaticity factors for marking colours (and definitions of chromaticity boundaries for colours) except for yellowish green	a recommendation becomes a requirement
6.2.?	GAR 1.H030 (c)	Groups of bands on obstacles	?	Bands on the obstacles with the main vertical axes can create groups. Each group should have at least 5 bands with the total width not less than 20 m. Obstacle with the height of 120 m or less should be marked with one group of bands. Obstacle higher than 120 m but less than 180 should be marked with 2 groups. Obstacles 180 m high or higher should have one group on each 60 m of the total height.	new recommendation in GAR
6.2.?	GAR 1.H030 (d)	marking of wind turbines	?	Wind turbines, which are considered as obstacles, shall be marked. The pattern and/or colours of the pattern shall contrast with the background against which they will be seen.	new requirement in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
6.2.?	ACJ-GAR 1.H030 (d)	marking of wind turbines	?	Marking of wind turbines may vary from situation to situation. Final decision about pattern and used colours can be influenced by different factors such as: <ul style="list-style-type: none"> <li>o total height of wind turbine,</li> <li>o location,</li> <li>o colour of background,</li> <li>o air operation in the area,</li> <li>o number of wind turbines within wind farm and</li> <li>o environmental restrictions.</li> </ul>	new recommendation in GAR
6.2.8	GAR 1.H035 (d)	use of markers on wires or cables	A marker displayed on an overhead wire, cable, etc., should be spherical and have a diameter of not less than 60 cm.	A marker displayed on an overhead wire, cable, etc., shall be spherical and have a diameter of not less than 60 cm.	a recommendation becomes a requirement
6.2.9 and 6.2.10	GAR 1.H035 (e) (f) and (g)	characteristics of markers	recommendations on the spacing and colour of markers	requirements on the spacing and colour of markers	recommendations become requirements in GAR
6.2.13	GAR 1.H040(c)	colour of flags to mark fixed obstacles	Flags used to mark fixed obstacles should be orange in colour or a combination of two triangular sections, one orange and the other white, or one red and the other white, except that where such colours merge with the background, other conspicuous colours should shall be used.	Flags used to mark fixed obstacles shall be orange in colour or a combination of two triangular sections, one orange and the other white, or one red and the other white, except that where such colours merge with the background, other conspicuous colours shall be used.	a recommendation becomes a requirement
6.2.?	ACJ-GAR 1.H025	Obstacle that exceeds an overall height of 100 m above ground level	?	Any temporary or permanent obstacle that exceeds an overall height of 100 m above ground level, wind turbines and all skeletal structures should be preferably lighted with medium intensity or high intensity lights.	new recommendation in GAR
6.3.?	GAR 1.H045(b)	use of colour for the lighting of objects : chromaticity factors	?	requirement on chromaticity factors for the colours of lights (and definitions of chromaticity boundaries for colours): use of ordinary aeronautical ground lights requirements in Appendix 1 of annex 14 (2.1)	new requirement in GAR
6.3.2	GAR 1.H050(a)	use of low intensity obstacles lights	Low-intensity obstacle lights, Type A or B, should be used where the obstacle is a less extensive one and its height above the surrounding ground is less than 45 m.	Low-intensity obstacle lights, Type A or B, shall be used where the obstacle is a less extensive one and its height above the surrounding ground is less than 45 m.	a recommendation becomes a requirement

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
6.3.3	GAR 1.H050(b)	use of obstacles lights: need of an early special warning	When an early special warning is required and the use of low-intensity obstacle lights, Type A or B, is inadequate, then medium or high-intensity obstacle lights should be used.	When an early special warning is required and the use of low-intensity obstacle lights, Type A or B, is inadequate, then medium or high-intensity obstacle lights shall be used.	a recommendation becomes a requirement
6.3.6	GAR 1.H050(e)	use of obstacles low-intensity lights	Low-intensity obstacle lights, Type B, should be used either alone or in combination with medium-intensity obstacle lights, Type B in accordance with 6.3.7	Low-intensity obstacle lights, Type B, shall be used either alone or when the obstacle is an extensive one or its height above the level of the surrounding ground is greater than 45 in combination with medium-intensity obstacle lights, Type B	a recommendation becomes a requirement ?
6.3.7, 6.3.8, 6.3.9 and 6.3.10	GAR 1.H050(f) (g), (h) and (i)	use of obstacles medium and high-intensity lights	recommendations on the use of obstacles medium and high-intensity lights	requirements on the use of obstacles medium and high-intensity lights	recommendations become requirements in GAR
6.3.?	GAR 1.H050 (j)	lighting of wind turbines	?	Wind turbines which are considered as obstacles shall be lighted.	new requirement in GAR
6.3.12	GAR 1.H055 (b)	location of top lights in the case of tall structures	In the case of chimney or other structure of like function, the top lights should be placed sufficiently below the top so as to minimize contamination by smoke etc.	In the case of chimney or other structure of like function, the top lights shall be placed sufficiently below the top so as to minimize contamination by smoke etc.	a recommendation becomes a requirement
6.3.15	GAR 1.H055 (e)	location of lights to mark obstacles	When the obstacle limitation surface concerned is sloping and the highest point above the obstacle limitation surface is not the highest point of the obstacle, additional obstacle lights should be placed on the highest point of the obstacle.	When the obstacle limitation surface concerned is sloping and the highest point above the obstacle limitation surface is not the highest point of the obstacle, additional obstacle lights shall be placed on the highest point of the obstacle.	a recommendation becomes a requirement
note after 6.3.20	GAR 1.H055 ?	positioning of high intensity obstacle lights at three level	remark about positioning of high intensity obstacle lights at three level as explained in 6.3.20: "this may require locating the lights off the tower".	?	note in Annex 14 not transferred to GAR section 2
6.3.21	GAR 1.H055 (k)	location of lights to mark obstacles	The installation setting angles for high-intensity obstacle lights, Types A and B, should be in accordance with Table (...)	The installation setting angles for high-intensity obstacle lights, Types A and B, shall be in accordance with Table 2-1.	a recommendation becomes a requirement
note after 6.3.28	ACJ-GAR 1.H060 (f) ?	characteristics of low intensity obstacles lights	"See annex 2 for lights to be displayed on aircrafts"	?	note in Annex 14 not transferred to GAR section 2

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
	6.3.36	GAR 1.H070 (d) (or ACJ- GAR 1.H070 ?)	high-intensity lights for a tower supporting cables or wires	High-intensity obstacle lights, Type B, indicating the presence of a tower supporting overhead wires, cables, etc., should flash sequentially; first the middle light, second the top light and last, the bottom light. The intervals between flashes of the lights should approximate the following ratios: (...)	High-intensity obstacle lights, Type B, indicating the presence of a tower supporting overhead wires, cables, etc., shall flash sequentially; first the middle light, second the top light and last, the bottom light. The intervals between flashes of the lights shall approximate the following ratios: (...)	a recommendation becomes a requirement ?
Annex 14 chapter 7 - GAR Subpart J	7.1.2	GAR 1.J350 (a) (2)	closed runways and taxiways, or parts thereof	A closed marking should be displayed on a temporarily closed runway or taxiway or portion thereof, except that such marking may be omitted when the closing is of short duration and adequate warning by air traffic services is provided.	A closed marking shall be displayed on a temporarily closed runway or taxiway or portion thereof, except that such marking may be omitted when the closing is of short duration and adequate warning by air traffic services is provided.	a recommendation becomes requirement
	7.2.2 and 7.2.3	GAR 1.J355 (b) (c)	Non-load-bearing surfaces	A taxi side stripe marking should be placed along the edge of the load-bearing pavement, with the outer edge of the marking approximately on the edge of the load-bearing pavement. A taxi side stripe marking should consist of a pair of solid lines, each 15 cm wide and spaced 15 cm apart and the same colour as the taxiway centre line marking.	A taxi side stripe marking shall be placed along the edge of the load-bearing pavement, with the outer edge of the marking approximately on the edge of the load-bearing pavement. A taxi side stripe marking shall consist of a pair of solid lines, each 15 cm wide and spaced 15 cm apart and the same colour as the taxiway centre line marking.	recommendations become requirement
	7.3 (7.3.1, 7.3.2 and 7.3.3)	GAR 1.J360 (a) (b) (c)	Pre-threshold area	recommendations on the use of chevron markings when the surface before a threshold is paved and exceeds 60 m in length and is not suitable for normal use by aircraft + positioning+ characteristics of chevrons	requirements on the use of chevron markings when the surface before a threshold is paved and exceeds 60 m in length and is not suitable for normal use by aircraft + positioning+ characteristics of chevrons	recommendations become requirement
	7.4.5, 7.4.6 and 7.4.7	GAR 1.J365 (c) (3), (4) and (5)	Unserviceable area	recommendations on heights and colours for unserviceability flags, cones and marker boards.	requirements on heights and colours for unserviceability flags, cones and marker boards.	recommendations become requirement
Annex 8 - GAR Subpart K	8.1.2 (and 8.2.1)	GAR 1.K010	Design of the electrical system	the design and provision of electrical systems for the power supply, visual and navigational aids systems shall be so that an equipment failure will not leave the pilot with inadequate visual guidance or misleading information. (+ same requirement as GAR given in 8.2.1)	<u>For a runway meant for use in runway visual range conditions less than a value of 550 m,</u> the electrical systems for the power supply, lighting and control of the lighting systems shall be so designed that an equipment failure will not leave the pilot with inadequate visual guidance or misleading information.	no obligation in GAR for the design and provision of the power supply for runway used only by RVR>550m

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
8.1.3	GAR 1.K001 (c)	electrical power supply system	Electric power supply connections to those facilities for which secondary power is required should be so arranged that the facilities are automatically connected to the secondary power supply on failure of the normal source of power.	Electric power supply connections to those facilities for which secondary power is required shall be so arranged that the facilities are automatically connected to the secondary power supply on failure of the normal source of power.	a recommendation becomes a requirement
8.1.4	GAR 1.K001 (d)	electrical power supply system : switch over times	The time interval between failure of the normal source of power and the complete restoration of the services shall be as short as practicable except that for visual aids associated with non-precision approach or take-off runways, the requirements in Table 8-1 shall apply.	The time interval between failure of the normal source of power and the complete restoration of the services shall be as short as practicable except that for visual aids associated with non-precision approach or take-off runways, the requirements in Table ZZZ shall apply.	a recommendation becomes a requirement
8.1.8	GAR 1.K001? (or GAR.K001 (a))	electrical system for a primary rwy which is a non-precision runway	At an aerodrome where the primary runway is a non-precision approach runway, a secondary power supply capable of meeting the requirements (...) should be provided except that a secondary power supply for visual aids need not be provided for more than one non-precision approach runway.	? (or: Adequate power supply shall be available at aerodromes for the safe functioning of air navigation facilities.)	no specific recommendation on the power supply in GAR for primary rwy which is a non-precision runway
8.1.9	GAR 1.K001?(or GAR.K001 (a))	electrical system for a primary rwy which is a non-instrument runway	At an aerodrome where the primary runway is a non-instrument runway, a secondary power supply capable of meeting the requirements of 8.1.4 should be provided, except that a secondary power supply for visual aids need not be provided when an emergency lighting system in accordance with the specification of 5.3.2 is provided and capable of being deployed in 15 minutes.	? (or : Adequate power supply shall be available at aerodromes for the safe functioning of air navigation facilities.)	no specific recommendation on the power supply in GAR for primary rwy which is a non-instrument runway
8.1.10	GAR 1.K001(b)	aerodrome facilities connected to the secondary power supply	recommendation on what aerodrome facilities should be connected to the secondary power supply	requirement on what aerodrome facilities shall be connected to the secondary power supply	a recommendation becomes a requirement
8.2.2	GAR 1.K010?	Design of the electrical system	Where the secondary power supply of an aerodrome is provided by the use of duplicate feeders, such supplies shall be physically and electrically separate so as to ensure the required level of availability and independence.	?	standard about duplicate feeders is missing in GAR

Annex 14 chap

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference				
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference	
8.2.3	GAR 1.K010?	Design of the electrical system	Where a runway forming part of a standard taxi route is provided with runway lighting and taxiway lighting, the lighting systems shall be interlocked to preclude the possibility of simultaneous operation of both forms of lighting.	?	standard about runway forming part of a standard taxi route is missing in GAR	
8.3.1	GAR 1.K015(a)	monitoring of visual aids	A system of monitoring should be employed to indicate the operational status of lighting systems.	A system of monitoring visual aids shall be employed to ensure lighting system reliability.	a recommendation becomes a requirement	
8.3.3	GAR 1.K015?	Monitoring of change in the operational status of lights	Where a change in the operational status of lights has occurred, an indication should be provided within two seconds for a stop bar at a runway holding position and within five seconds for all other types of visual aids.	?	missing recommendations in GAR about monitoring of change in the operational status of lights	
8.3.4 and 8.3.5	GAR 1.K015 (c) and (d)	monitoring of lighting systems for a rwy in use in RVR<550m	recommendations on monitoring of lighting systems for a rwy in use in RVR<550m	requirements on monitoring of lighting systems for a rwy in use in RVR<550m	recommendations become requirements in GAR	
Annex 14 chapter 9 - GAR Subpart D and K	9.1.1 and 9.1.2	GAR 1.D145 (a)	Emergency plan	requirement in general to establish an emergency plan to provide for the coordination of the actions to be taken in an emergency occurring at an aerodrome or in its immediate vicinity.	Requirement for the aerodrome operator to establish an emergency plan to provide for the coordination of the actions to be taken in an emergency occurring at an aerodrome or in its immediate vicinity.	addition of the role of Aerodrome operator in GAR
	note after 9.1.2	ACJ-GAR 1.D145 ?	examples of emergencies	enumeration of examples of emergencies	?	missing IEM in the section 2 of GAR
	9.1.3	ACJ-GAR 1.D145 (a) 1	objective of the Emergency plan	requirement to coordinate the response (...) of all existing agency	The Emergency plan should provide for (...) the coordination of the response and/or participation of all existing agencies	a requirement is transferred to section 2 as an AMC: more freedom in GAR
	9.1.5	ACJ-GAR 1.D145 (a) 2	content of the emergency plan document	recommendation on a list of items to include in the plan document	recommendation on a list of items to include + "Localities for handling of friends and/or family, and media and the siting of a temporary morgue, in an emergency situation "	addition of an information to include in the plan document
	9.1.6 + note	GAR 1.D145 ?	human factors observance in the emergency plan	requirement to observe human factors in the emergency plan, and recommendation to use guidance in the Human Factor training Manual	?	no requirement and recommendations in GAR about human factors observance in the emergency plan

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
9.1.7 to 9.1.11	ACJ-GAR 1.D145 ?	Emergency plan : emergency operations centre and command post	recommendations on emergency operations centre and command post	?	no recommendations in GAR about emergency operations centre and command post

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
9.1.12	ACJ-GAR 1.D145 1	objective of the Emergency plan	the plan shall contain procedures for periodic testing (...)	The emergency testing should provide for (...) the procedures for periodic testing	a requirement is transferred to section 2 as an AMC
9.1.13	ACJ-GAR 1.D145 (b) 2 and GAR 1.D145 (b)	emergency exercises	Requirement to test the plan each 2 years with a full-scale exercises + each year with partial exercises	"The Aerodrome Operator shall conduct emergency exercises to prove the efficiency of the emergency plan. The frequency of such exercises will be agreed with the Civil Aviation Authority, and laid out in the Aerodrome Manual". Recommendation to test the plan each 2 years with a full-scale exercises + each year with partial exercises	a requirement is transferred to section 2 as an AMC: more freedom in GAR about the frequency of exercises; but obligation to put it in the AM
note after 9.1.13	ACJ-GAR 1.D145 (b) ?	purpose of emergency exercises	explanation of the purpose of emergency exercises	?	missing IEM in the section 2 of GAR
9.1.14	ACJ-GAR 1.D145 (b)1	emergency exercises in difficult conditions	requirement to test the plan in difficult conditions	"The plan should include emergencies exercises in any difficult terrain in the vicinity of the aerodrome. "	a requirement is transferred to section 2 as an AMC: more freedom in GAR
9.2.1	GAR 1.D150 (a) (1)	applicability of RFF	all aerodromes shall have RFF equipment and services	The Aerodrome Operator shall ensure that Rescue and Fire Fighting equipment and service are provided at certified aerodromes with the primary objective to save lives in the event of an aircraft accident or incident	RFF is required only at certified aerodromes in GAR,
9.2.?	GAR 1.D150 and ACJ-GAR 1.D150 2.2	responsibility of RFF	?	The Aerodrome Operator shall ensure that Rescue and Fire Fighting equipment and service are provided (...)	requirement that RFF are under first responsibility of the aerodrome operator in GAR
9.2.2	GAR 1.D150?	difficult terrain condition for RFF	requirement to have specialist and RFF equipment appropriate to bad conditions	?	no specific requirement in GAR about difficult terrain condition for RFF
9.2.3 to 9.2.7	GAR 1.D150(a) (2)	level of protection and service	the level of protection shall be appropriate to the aerodrome category (itself dependent on the dimensions of the "normal" critical, aircraft as given in Table 9-1); it can be modulated according to the aircrafts in operations.	The level of Rescue and Fire Fighting Service to be provided shall be: (i) Commensurate with the type of aircraft and operations, (ii) As determined by the national Civil Aviation Authority.	level of protection and service is determined by CAA in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
9.2.8 to 9.2.19	GAR 1.D150 (d) + table	Extinguishing agents for RFF		problem with explanation in GAR : not clear	to be clarified, but apparently, the quantity required in GAR is superior than in Annex 14
9.2.20, 9.2.33, and 9.2.36	GAR 1.D150(b) (1)	availability and number of rescue equipment, vehicles and personnel	recommendations to have the number of rescue equipment, vehicles and personnel related to operations and available; recommendation to have at least 1 vehicles, whatever the category.	"Whenever the Aerodrome is operated, sufficient number of vehicles, equipment and trained personnel shall be readily available". Not recommendation to have at least 1 vehicle for cat 1, 2, or 3.	in GAR, possibility to have 0 vehicle for cat 1,2 or 3, but requirement to have everything always available
9.2.21, 9.2.22, 9.2.2.3, 9.2.24 and 9.2.25	GAR 1.D150(c)	response time for RFF	requirement is <3min to any point of the operational runway in optimum visibility and surface condition and 2min is recommended.	The operational objective of the rescue and fire fighting service shall be to achieve a response time, and to be in position for extinguishing or suppressing fire to allow rescue of passengers and crew, to any point of each operational runway, in optimum visibility and surface conditions. This response time for vehicles and appliances to be in position and applying media at 50% of the required rate shall be 2 minutes but not exceeding 3 minutes.	pb : in GASR training course, the response time in GAR is 3 min for RWY code 3 or 4 and 2min in area elsewhere than the RWY; in the GAR itself, there is no difference between Annex 14 and GAR about response time for RFF;
9.2.24	?	response time for RFF : other vehicles arrival	Any other vehicles required to deliver the amounts of extinguishing agents specified in Table 9-2 should arrive no more than one minute after the first responding vehicle(s) so as to provide continuous agent application	?	no recommendation in GAR about the time of arrival of the other RFF vehicles
9.2.26 to 9.2.30	?	Emergency access roads	recommendations on emergency access roads	?	no specific recommendations are given in GAR
9.2.34, 9.2.35,	GAR 1.D150(b) (2) and ACJ-GAR 1.D150 (b) 1	competence of personnel	requirement about training which shall include "live fire drills, including pressure fed fuel fires", and "human performance"	requirement to be efficient for the personnel + recommendation on how to train them to achieve competence	more freedom in GAR about the content of the training and no requirement about fire drills and human performance

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
9.2.38	ACJ-GAR 1.D150 (b) 5	personnel equipment	All responding rescue and fire fighting personnel shall be provided with protective clothing and respiratory equipment to enable them to perform their duties in an effective manner.	All responding rescue and fire fighting personnel should be provided with protective clothing and respiratory equipment to enable them to perform their duties as safely as possible and in an effective manner.	requirement in Annex 14 about protective clothing is an advisory material in GAR
9.3 (9.3.1 to 9.3.2)	GAR 1.D055 (b) (1)	disabled aircraft removal	recommendation to have a plan, a coordinator for the plan, and to base the plan on the characteristics of the normal aircraft which operates at the aerodrome	requirement to have procedures for the removal of aircrafts and procedures for the amendment of declared distances after a crash	new requirement in GAR (introduction of special procedures)
9.4	GAR 1.D090	Bird hazard reduction (wildlife management)	requirement to collect information on the bird hazard, to take actions if necessary and to eliminate dangerous garbage disposal	requirement to establish a programme to identify and control due to animals and advisory material about implementation of the programme (collection and distribution of data, actions, reporting, training of personnel; environmental survey, landscape and habitat management, zoning)	introduction in GAR of a new requirement which is to have a "programme", for all animals and not only birds. No specific requirement in GAR about actions to take on the aerodrome and elimination of garbage disposal.
9.5.3 to 9.5.7	GAR 1.D115	Apron management service	requirement about means (radiotelephony facilities), restriction of vehicles when LVP, priority of emergency vehicle, driving rules on an apron and visual monitoring of aircraft stand.	"The Aerodrome Operator shall establish an appropriate Apron Management Service."	very general requirement in GAR; no specific requirements about means (radiotelephony facilities), restriction of vehicles when LVP, priority of emergency vehicle, driving rules on an apron and visual monitoring of aircraft stand.

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
9.6 (9.6.1 and 9.6.2)	GAR 1.D110	Ground servicing of aircraft	requirement to have fire extinguishing equipment readily available to start to handle a fire, and to warranty exits escape for passengers which are in a refuelling aircraft	"The Aerodrome Operator shall establish provisions for parking and ground servicing of Aircraft to the scope and extent agreed with the Aircraft Operator."	more general requirement in GAR. No specific requirement about extinguishing equipment readily available or exits warranty. Agreement with the aircraft operator is prominent.
9.7 (9.7.1 to 9.7.5)	GAR 1.D060 and GAR 1.D070	Aerodrome vehicle operations	requirements on aerodrome vehicles operations	requirements on aerodrome vehicles operations + control of vehicles (maintenance of vehicles) + procedures in the Aerodrome manual about the use of radio by vehicles	new requirement in GAR : control of vehicles + procedures about the use of radio by vehicles
9.8 (9.8.1 to 9.8.8)	GAR 1.D100	SMGC system	the only requirement is to provide a AMGC system at an aerodrome (+special requirement when selective switching stop bars and taxiway centre lights : see next row)	requirement to provide an SMGC system, and low visibility procedures, and an AMFEL. There is also a requirement to develop the LVP in connection with the ATS	introduction in GAR of new requirements which are to have LVPs developed with ATS, and to establish an AMFEL
9.8.6	ACJ-GAR 1.D100 4	SMGC system	Where a surface movement guidance and control system is provided by selected switching of stop bars and taxiway centre line lights, taxiway routes which are indicated by illuminated taxiway centre line lights shall be capable of being terminated by an illuminated stop bar; the control circuits shall be so arranged that when a stop bar located ahead of an aircraft is illuminated, the appropriate section of taxiway centre line lights beyond it is suppressed; and the taxiway centre line lights are activated ahead of an aircraft when the stop bar is suppressed.	Where a surface movement guidance and control system is provided by selected switching of stop bars and taxiway centre line lights, taxiway routes which are indicated by illuminated taxiway centre line lights should be capable of being terminated by an illuminated stop bar; the control circuits should be so arranged that when a stop bar located ahead of an aircraft is illuminated, the appropriate section of taxiway centre line lights beyond it is suppressed; and the taxiway centre line lights are activated ahead of an aircraft when the stop bar is suppressed.	a standard in Annex 14 becomes an advisory material (section 2 material in GAR)
9.9.4	GAR 1.K025 (c)	Siting of equipment and installations on operational areas	Any equipment or installation required for air navigation purposes which must be located on the non-graded portion of a runway strip should be regarded as an obstacle and should be frangible and mounted as low as possible.	Any equipment or installation required for air navigation purposes which must be located on the non-graded portion of a runway strip shall be regarded as an obstacle and shall be frangible and mounted as low as possible.	a recommendation becomes a requirement

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
	9.9.8	ACJ-GAR 1.K025 ?	Siting of equipment and installations on operational areas	Any equipment or installation required for air navigation purposes which is an obstacle of operational significance (...) should be frangible and mounted as low as possible.	?	missing recommendation in GAR
	9.10 (9.10.1 to 9.10.5)	GAR 1.K020 (a) to (d)	Fencing	recommendations on fences to provide to prevent the access on the movement area or to special facilities to animals or persons	requirements on fences to provide to prevent the access on the movement area or to special facilities to animals or persons	recommendations become requirements in GAR
	9.10.5 and 9.11	?	security measures	recommendations on security lights and areas	?	security issues which are not transferred to GAR
Annex 14 chapter 10; GAR Subpart D and F	10.2.4 and 10.2.5	ACJ-GAR 1.F001 (f) 3 and 6	corrective actions for the friction of the RWY	requirement to take corrective actions for RWY when being below a minimum friction level given by the State, and recommendation to take corrective actions when being below a planned level given by the State	advisory material to take corrective action	a standard in Annex 14 becomes an advisory material (section 2 material in GAR)
	10.2.6	ACJ-GAR1.F001 (f) 5	problems of drainage for a runway	when problems of drainage for a runway are suspected, an assessment of the runway friction should be made, by natural or simulated means, and corrective actions should be taken as necessary	when problems of drainage for a runway are suspected, an assessment of the runway friction should be made, by natural means only, and corrective actions should be taken as necessary	recommendation in GAR is only to test drainage under natural conditions.
	10.2.7	GAR1.F040 (c) and (e) and GAR 1.D125 (b)(1)	surface of taxiway shoulders used by turbine-engined aeroplanes	recommendation to clear the shoulders to prevent loose stones or objects from being ingested by the engines.	requirement to clear the shoulders to prevent loose stones or objects from being ingested by the engines.	a recommendation becomes a requirement
	10.2.8, 10.2.9, 10.2.10 and 10.2.11	GAR 1.D125 (a) and (b)(1)	clearing of contamination on RWY, taxiways and aprons	requirement to remove contaminants of a RWY and recommendation to do it for taxiways and aprons	requirement to remove contaminants of a RWY, taxiways and aprons	recommendation to clear taxiway and apron surface from contamination becomes a requirement
	10.2.12 and 10.2.13	?	use of chemical to remove ice	recommendation on the use of chemicals and requirement to not use chemical harmful for the environment	?	no requirement and recommendations in GAR about use of chemicals to maintain the paved surfaces

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	caracterisation of the difference
10.2.?	GAR 1.D125 (a) and (b)	existence of maintenance procedures for surfaces of the movement area	recommendations to have procedures	requirement to have procedures for the maintenance of surfaces on the movement area	recommendations in Annex 14 become requirements
10.2.?	GAR 1.D125 (b)	scope of maintenance procedures for surfaces of the movement area	recommendations to have procedures but no details about what aspects	"The procedures shall cover at least the following items: Clearing of contamination of paved surfaces within the movement area; Friction monitoring of paved surfaces within the movement area for winter operations; Friction monitoring of the runway for long-term maintenance operations; Maintenance and Monitoring of the Compass Swinging base for magnetic anomalies".	introduction of a new requirement in GAR about a minimum level for procedures of maintenance for surfaces on the movement area
10.2.?	GAR 1.D125 (a)	responsibilities related to maintenance procedures for surfaces of the movement area	?	"The Aerodrome operator shall ensure (...) that procedures are established".	introduction of the required role of the Aerodrome operator in GAR
10.3	?	runway pavement overlay	requirements and recommendations about overlaying	?	missing requirements and recommendations in GAR
10.4.2	GAR 1.D130 and ACJ-GAR 1.D129	maintenance of visual aids	"A system of preventive maintenance of visual aids shall be employed to ensure lighting and marking system reliability"	The Aerodrome Operator shall establish a maintenance programme for preventive and reactive maintenance of the aerodrome visual aids installations.	introduction in GAR of the role of the Aerodrome operator and of the notion of "reactive maintenance"
10.4.?	GAR 1.D130 and ACJ-GAR 1.D130	maintenance of visual aids : notification to the ATS	?	Failure or irregular operations of the systems shall be notified to the local Air Traffic Service unit.	introduction of a new requirement in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
10.4 (10.4.1 to 10.4.13)	GAR 1.D130 and ACJ-GAR 1.D130	maintenance of visual aids	requirements and recommendations about objectives and means to ensure the maintenance of visual aids	"The Aerodrome Operator shall establish a maintenance programme for preventive and reactive maintenance of the aerodrome visual aids installations." + advisory material about flights checks and ground checks	much freedom is left to the Aerodrome operator in GAR: no requirements or recommendations are given about intensity, beam coverage or direction
10.?	GAR 1.D015 and ACJ-GAR 1.D015	agreements with contractors (or providers)	?	The Aerodrome Operator shall ensure written operating procedures are established between the Aerodrome operator and all contractors (providers) delivering products and/or services to or at the Aerodrome aircraft manoeuvring area.	introduction of a new requirement in GAR
10.?	GAR 1.D020 and ACJ-GAR 1.D020	The aerodrome management function and the appointment of an accountable manager	?	The Accountable Manager shall have full authority over all airside operations, or operations that may impact upon aircraft safety, on the aerodrome.	introduction of a new requirement in GAR
10.?	GAR 1.D025 and ACJ-GAR 1.D025	Aerodrome operator responsibilities	?	The Accountable Manager is accountable to the Aerodrome Operator for the operation of the Aerodrome with its facilities and equipment.	introduction of a new requirement in GAR
10.?	GAR 1.D025 and ACJ-GAR 1.D025	competence of all personnel and training	?	The Competence of all Staff, and suitability of allocated resources, shall be adequate to safely achieve the Aerodrome safety objectives	introduction of a new requirement in GAR
10.?	GAR 1.D025 and ACJ-GAR 1.D025	measures to be taken in case of operational changes	?	requirement to inform the CAA and to assess the impact of any anticipated change and to take the necessary action implied by these changes to maintain an acceptable level of safety	introduction of a new requirement in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
10.?	GAR 1.D50 and ACJ-GAR 1.D50	access to the movement area	?	The Aerodrome Operator is responsible for ensuring there is a system for issuing permits giving access to the movement area. No person shall be permitted to the movement area unless they are escorted, or carry proof of airside safety training. Access to the manoeuvring area requires clearance from the local Air Traffic Control Service. Persons or vehicles moving within the movement area shall, unless otherwise instructed by ATC, give way to aircraft. To ensure their safety, passengers shall be escorted when crossing to/from an aircraft on an apron. The control of movement of passengers to and from aircraft shall be laid out in the aerodrome airside procedure guide	introduction of a new requirement in GAR
10.?	GAR 1.D55 and ACJ-GAR 1.D55	Foreign objects	?	The Aerodrome Operator shall ensure that regular inspection of all aircraft movement areas is carried out and recorded. An essential part of this inspection will be the collection and removal of Foreign Objects (FOD) that may damage aircraft.	introduction of a new requirement in GAR
10.?	GAR 1.D55 and ACJ-GAR 1.D56	amendment of declared distances either as a result of a crashed/immobile aircraft or other obstruction.	?	requirement to amend declared distances either as a result of a crashed/immobile aircraft or other obstruction.	introduction of a new requirement in GAR
10.?	GAR 1.D060	Aerodrome vehicle operations : maintenance of vehicles	?	The Aerodrome Operator shall ensure that all vehicles, whether operated by aerodrome staff or contractors providers, are adequately maintained to perform airside duties, and are suitable for the duties required of them.	introduction of a new requirement in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
10.?	GAR 1.D075	Clearance Distances to Aircraft	?	Vehicles and mobile equipment shall be manoeuvred, positioned or parked with such clearance distances that ensure the safety of aircraft, people or equipment. Clearance distance to aircraft with running engines shall be according to the advice of either the aircraft operator or the aerodrome operator, depending which is the most stringent.	introduction of a new requirement in GAR
10.?	GAR 1.D080	Protected Areas, Manoeuvring Area, Approach and Departure Areas	?	changes in critical areas of radar and radio navigation facilities shall be checked; the manoeuvring area shall be marked and shown on the aeronautical charts; roads crossing the manoeuvring approach or departure areas shall be marked to prevent vehicles from penetrating in the OLS during aircraft operations	introduction of new requirements in GAR
10.?	GAR 1.D085	Aerodrome Vicinity safety protection	?	The Aerodrome Operator shall ensure its local airspace around the aerodrome is safe for the operation of aircraft. Local airspace shall be that area enclosed by and under the protected surfaces required for a particular aerodrome. Consideration must be given to at least the following hazards or potential hazards (...)	introduction of new requirements in GAR
10.?	GAR 1.D088	Obstacle environment programme and marking of temporary obstacles	?	requirements on the management of obstacles to keep the OLS free from obstacles and requirements on the marking and lighting of temporary obstacles	introduction of new requirements in GAR
10.?	GAR 1.D095	Level of ATC service	?	"the Civil Aviation Authority shall establish what level of Air Traffic Control Service is required at a particular aerodrome"	introduction of new requirements in GAR
10.?	GAR 1.D105	Meteorological Service and Equipment	?	"Meteorological services and equipment intended for air navigation purposes shall be held available and in working order whenever the Aerodrome is being operated. Any equipment not available shall be NOTAMed as unavailable.	introduction of new requirements in GAR

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
	10.?	GAR 1.D120	Fuelling service	?	Where an aircraft fuelling facility is provided, the Aerodrome Operator shall ensure the quality of the fuel is maintained during storage in aerodrome facilities, and during delivery to aircraft. The conditions in which the quality of fuel is maintained shall be described in the aerodrome manual	introduction of new requirements in GAR
	10.?	GAR 1.D135	maintenance and operation of ground based facilities and equipment radiating electromagnetic waves for air navigation	?	Where provided, the Aerodrome Operator shall ensure that there is in place a suitable programme for the maintenance and operation of equipment radiating electromagnetic waves for air navigation.	introduction of new requirements in GAR
	10.?	GAR 1.D140	Aircraft De-icing Service	?	Where required or warranted by climatic conditions, the Aerodrome Operator shall at least when serving commercial air transportation, ensure availability of aircraft de-icing facilities and services.	introduction of new requirements in GAR
Appendix 1 to annex 14	Appendix 1 to Annex 14 2.1.1, 2.1.2 and 2.1.3	subpart J	colours for aeronautical ground lights	requirement on the chromaticity of aeronautical ground lights (and recommendation on special cases)	?	missing requirements and recommendations in GAR
	Appendix 1 to Annex 14 2.2.1, 2.2.2, 2.2.3, 2.2.4 and 2.2.5	subpart J	colours for aeronautical ground lights : dicriminations between lights	requirements and recommendations to discriminate lights	?	missing requirements and recommendations in GAR
	Appendix 1 to annex 14 3.1 to 3.4	Subpart J	colours for markings, signs and panels (except for obstacle markings which is dealt with in GAR subpart H)	requirements and recommendations on colours for markings, signs and panels	?	missing requirements and recommendations in GAR
Subpart C	?	GAR 1.C005	obligation to have a SMS	?	an Aerodrome must have a system for managing safety, to which it is committed	introduction of a new requirement in GAR

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
GAR	?	GAR 1.C010	fundamental elements of the policy for safety management	?	requirement on 7 items (safety priority, business objective for safety, commitment for a proactive approach of safety, safety-related responsibilities, compliance with standards, policy with subcontractors)	introduction of a new requirement in GAR
	?	GAR 1.C015	safety levels	?	establishment of safety levels	introduction of a new requirement in GAR
	?	GAR 1.C020	safety assessment	?	requirement to assess all existing operations changes, additions...	introduction of a new requirement in GAR
	?	GAR 1.C025	safety assessment records	?	An Aerodrome Operator shall identify and record : the safety requirements for a service or product; the results of the safety assessment process; and evidence that the safety requirements have been met. These records shall be maintained and kept up to date throughout the life of the service or product	introduction of a new requirement in GAR
	?	GAR 1.C030	competency of staff	?	An Aerodrome Operator shall ensure that staff remains adequately trained and qualified for the tasks they are required to undertake	introduction of a new requirement in GAR
	?	GAR 1.C035	Safety management accountability	?	An Aerodrome Operator shall ensure that there is accountability , at a suitable senior level in its organisation for the management, production and monitoring of the safety management system. This does not relieve the holder of the Aerodrome Certificate from responsibility.	introduction of a new requirement in GAR
	?	GAR 1.C040	Safety Audits	?	An Aerodrome Operator shall carry out safety audits to provide assurance of the safety of activities and to confirm compliance with the safety requirements and the safety management system. Safety Audits shall be conducted at such a frequency that safety levels are not compromised.	introduction of a new requirement in GAR

Differences between ICAO annex 14 and GAR

ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
		Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
?	GAR 1.C045	Safety Monitoring and reporting	?	An Aerodrome Operator shall have in place suitable monitoring arrangements so that undesirable trends in service or product performance can be recognised and be subject to remedial action. The Aerodrome Management operator shall: Establish a reporting system for accident and incident reporting ensuring that the Civil Aviation Authority is informed of the aviation safety aspects in connection with the operation of the Aerodrome; Investigate all occurrences; identify safety significant aspects, failures of its management of safety and take all necessary corrective action.	introduction of a new requirement in GAR
?	GAR 1.C050	Document and Data control	?	The Aerodrome Management operator shall establish and maintain procedures in order to trace all documents and data related to the Safety Management System. The procedures must ensure that all safety related documents and data are available. Invalid or obsolete documents and data must be eliminated and secured against unintended use.	introduction of a new requirement in GAR
?	GAR 1.C055	Safety Assurance Documentation (SAD)	?	An Aerodrome Operator shall produce and maintain safety assurance documentation (SAD), which shall include a certain number of items	introduction of a new requirement in GAR
?	GAR 1.C060	Changes and modifications of a system	?	An Aerodrome Operator shall consult the Civil Aviation Authority, when planning to introduce new systems into operation, introduce changes to, or replace existing systems. The Aerodrome Operator shall show compliance with the safety requirements for any operational system. This can only take place after the Aerodrome Operator is satisfied that its own safety requirements, as well as those issued by the Civil Aviation Authority, are met.	introduction of a new requirement in GAR

Differences between ICAO annex 14 and GAR

	ICAO paragraph reference	GAR paragraph reference	Explanation of the difference			
			Issue addressed	ICAO regulation	GAR regulation	characterisation of the difference
GAR SUBpart Q	?	GAR 1.Q005	objects to be marked and/or lighted outside the OLS	?	general requirements on objects to be marked and/or lighted outside the OLS	introduction of a new requirement in GAR
	?	GAR 1.Q010	Marking of obstacles outside the obstacle limitation surfaces of 100 m high or higher	?	requirements on marking of obstacles outside the obstacle limitation surfaces of 100 m high or higher	introduction of a new requirement in GAR
	?	GAR 1. Q020	Marking of electrical masts and wires higher than 45m outside the OLS	?	requirements on marking of electrical masts and wires higher than 45m outside the OLS	introduction of a new requirement in GAR
	?	GAR 1. Q025	Marking of off-shores installations ???	?	requirements on marking of off-shores installations ???	introduction of a new requirement in GAR
	?	GAR 1. Q030	Use of colour outside the OLS	?	requirements on the use of colour outside the OLS	introduction of a new requirement in GAR
	?	GAR 1. Q035	Use of markers outside the OLS	?	requirements on the use of markers outside the OLS	introduction of a new requirement in GAR
	?	GAR 1. Q040	Lighting of obstacles outside the OLS	?	requirements on lighting of obstacles outside the OLS	introduction of a new requirement in GAR
	?	GAR 1. Q045	Use of obstacles lights outside the OLS	?	requirements on the Use of obstacles lights outside the OLS	introduction of a new requirement in GAR
	?	GAR 1. Q050	Location of obstacles lights outside the OLS	?	requirements on the location of obstacles lights outside the OLS	introduction of a new requirement in GAR
	?	GAR 1. Q055	Characteristics of obstacle lights outside the OLS	?	requirements on the characteristics of obstacle lights outside the OLS	introduction of a new requirement in GAR

Rationale behind difference	Comments GASR WG 41
<p>Include this requirement in Subpart A. Appendix 1 to be added at end of Subpart J</p>	

Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41



Rationale behind difference	Comments GASR WG 41

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Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41
Objective based regulation	
Interoperability	
Left as recommendation as not necessary for safety	
Interoperability	
Requirement is made clearer	
Interoperability	
Morse no longer required	

Rationale behind difference	Comments GASR WG 41
Objective based regulation	
Interoperability	
Interoperability	
Text corresponds to Attachment A, Section 16 of Annex 14	
Interoperability	
Rewording to avoid the use of the word "may"	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
No longer required	
Not required	
Enhances safety	
No longer required	
Not required	
Enhances safety	
Correction in wording and reference, use of chevron markings to ensure interoperability	

Rationale behind difference	Comments GASR WG 41
Enhances safety, includes "when desirable"	
This change takes into account Code 2 runways with LDA greater than 1,200 m	discussed; OK
Enhances safety	
Not required	
Enhances safety	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
No longer required	
Interoperability	'runway turn pad' to be added to Subpart F ; reference to be added
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Note not considered necessary	discussed; OK
Enhances safety	
Wording made more precise	
Enhances safety, includes "as are required"	
Enhances safety, includes "as required"	
Enhances safety, includes "as required"	
enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Interoperability	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Interoperability	
Has now been added to Subpart D, GAR 1.D085 but not in any great detail.	A reference to Annex 14 (§5.3.1) has to be added to SubPart D
Enhances safety	
Delete text relating to emergency lighting (due to unacceptable level of safety), then amend Subpart K accordingly. GAR 1.K001(d) The time interval between failure of the normal source of power and the complete restoration of the services shall be as short as practicable and shall not exceed the requirements in Table ZZZ. A maximum switchover time of 1 minute to be added to Table ZZZ for non-instrument runways.	discussed; OK; information discussed with task force Subpart K who agreed, now include in Subpart K.

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Enhances safety	
Interoperability and enhances safety	

Rationale behind difference	Comments GASR WG 41
AMC material	
Notes should be included in ACJ-GAR	notes added to Section 2
Moved to AMC	
AMC material	
Notes should be included in ACJ-GAR	notes added to Section 2
Moved to AMC	
Notes should be included in ACJ-GAR	notes added to Section 2

Rationale behind difference	Comments GASR WG 41
T-VASIS and AT-VASIS not used in Europe	
Enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Interoperability	
Enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	

	Comments GASR WG 41
Rationale behind difference	
Interoperability	
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Enhances safety	
AMC material	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Interoperability and enhances safety	
Interoperability and enhances safety	
Interoperability and enhances safety	
Interoperability and enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Interoperability and enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Interoperability and enhances safety	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	
Interoperability	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Interoperability	
Interoperability and enhances safety	
Interoperability	
No longer required at aerodromes	
Interoperability and enhances safety	
AMC material	

Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	
Interoperability and enhances safety	
Enhances safety	
Interoperability and enhances safety	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41
No longer required	

Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41



Rationale behind difference	Comments GASR WG 41
Enhances safety	
Enhances safety	
Enhances safety	
Enhances safety	

Rationale behind difference	Comments GASR WG 41

Rationale behind difference	Comments GASR WG 41

<b>Rationale behind difference</b>	<b>Comments GASR WG 41</b>



Rationale behind difference	Comments GASR WG 41
[Red]	
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Rationale behind difference	Comments GASR WG 41

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