

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

<b>Aerodrome</b>	
<b>Allocated Inspector(s)</b>	

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	Is there a person appointed within the organisation responsible for its aeronautical data activities and its aeronautical information provision activities?		Aerodrome Manual/QMS Manual(s) and supporting documentation including WI/Job Description.	139/2014 ADR.OR.D.007 Management of aeronautical data and aeronautical information ADR.OR.D.010 Contracted activities	Every aeronautical data activity of the aerodrome operator (even if there is another person responsible for performing this activity) must be monitored and managed by this appointed person. This person can be entitled to sign Formal Arrangements with entities with which aerodrome exchanges aeronautical data and/or aeronautical information.
	Did the AO establish a list of authorised individuals responsible for submitting changes to AIS products, including an individual ultimately responsible for data activities and in addition other individuals with limited authority and a clearly defined scope of authorised changes? Is this list updated on a regular basis by the person appointed by the Accountable Manager to be		QMS Manual(s) and supporting documentation including WI/Job Description, FA with AIS; correspondence with AIS/CAA.	139/2014 ADR.OR.D.007 Management of aeronautical data and aeronautical information ADR.OR.D.010 Contracted activities 73/2010 Annex VI Data protection requirements	Only signatories of organisations who have a signed Formal Arrangement with NATS will be allowed to nominate users to have access to the Data Originators Portal and act on their behalf. Every individual user will be required to register on the portal and will be assigned the authorisations and responsibilities of those previously documented in their organisations formal arrangements.

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	ultimately responsible for all data activities in the organisation?			referred to in article 9 Annex VII Quality, safety and security management requirements referred to in article 10 part c	
<b>ADR.OPS.A.005 (a)</b>					
1	Does the Aerodrome Operator (AO) determine, document and maintain data relevant to the aerodrome and available services?	Is there an established mechanism to ensure the currency of the aeronautical data? Does the AO ensure that their AI is up to date, that the published AI reflects the current environment and that it has maintained currency in accordance with any CAA schedules for survey or IFP review cycles?	QMS Manual(s), Aerodrome Manual.	139/2014 ADR.OR.E.005 Aerodrome manual ADR.OPS.A.010 Data quality requirements ADR.OPS.A.015 Coordination between aerodrome operators and providers of aeronautical information services	
		Does the AO perform and annual review of survey data? Is this reflected in a procedure (Aerodrome Manual)	Aerodrome Manual QMS Manuals and supporting documents (including WI)	73/2010 Annex IV Part D – Data Origination	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
		What is the evidence for this activity	Evidence of the Annual Review (i.e. the annual review report)		
<b>ADR.OPS.A.005 (b)</b>					
2	Does the AO provide data relevant to the aerodrome and available services to the users and relevant ATS and AIS providers?				
<b>AMC 1 ADR.OPS.A.005 (a)</b>					
3	Does the AO provide at least items 1-11 in section (a)?				
<b>AMC 1 ADR.OPS.A.005 (b)</b>					
4	Has the AO measured and reported to the AIS obstacle and terrain data in Area 3 and Area 2 (the part within the aerodrome boundary) in degrees, minutes, seconds and tenths of seconds?				
5	Has the top elevation type, marking and lighting (if any) of obstacles been reported to the AIS?				

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
<b>AMC 1 ADR.OPS.A.005 (c)</b>					
6	Has the AO provided data for all obstacles in Area 2 that are assessed as being a hazard to air navigation?				
<b>AMC 1 ADR.OPS.A.005 (d) 1-3</b>					
7	Has the AO provided electronic terrain and obstacle data for: <ul style="list-style-type: none"> <li>• Area 2A for those that penetrate the relevant obstacle data collection surface?</li> <li>• Penetrations of the take-off flight path area?</li> </ul> Penetrations of the aerodrome obstacle limitation surfaces?				
<b>AMC 1 ADR.OPS.A.005 (e)</b>					
8	Where Category 2 and 3 Precision approach operations are established has the AO provided electronic terrain and obstacle data for Area 4?				
<b>AMC 1 ADR.OPS.A.005 (f)</b>					

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
9	Has the AO established arrangements with the ATS providers and the Competent Authority for the provision of obstacles and terrain data outside of the aerodrome boundary?				It is our goal to achieve a harmonized approach, therefore UK CAA will publish CAP 1668 (draft CAP number may change) that details the arrangement valid in the UK and resulted from the ANO and CAP 232 practice. An Aerodrome Operator should provide obstacle and terrain data in Areas 2-4 (as described in CAP 1668). Where appropriate, aerodrome operator can seek individual arrangements with ATS and CAA with regards to the provision of data or provide an assessment whether the lack of a particular TOD data area (or its part) or any other differences in requirement would not compromise the safety of operations and remains in accordance with EU 139/2014.
<b>ADR.OPS.A.010</b>					
10	Does the AO have formal arrangements with all those organisations with which it exchanges aeronautical data/aeronautical information?				
<b>ADR.OPS.A.010 (a)</b>					

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
11	Does the AO provide data relevant to the aerodrome and available services with the required quality and integrity?				
<b>ADR.OPS.A.010 (b)(1)</b>					
12	Does the AO monitor data promulgated by ATS and AIS?				
<b>ADR.OPS.A.010 (b)(2)</b>					
13	Does the AO have a system in place to notify ATS and the AIS providers of changes to the aerodrome data?				
<b>ADR.OPS.A.010 (b)(3)</b>					
14	Does the AO have a system in place to notify the ATS and AIS providers of incorrect or inappropriate data?	Is there an established process of notifying ATS and AIS when the published data originating from the aerodrome operator is incorrect or inappropriate? Is it clear who is responsible for the notification?	Aerodrome Manual/QMS Manual(s) and supporting documents including WI	139/2014 ADR.OPS.A.010 Data quality requirements  73/2010 Annex IV Data Quality Requirements	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				referred to in Articles 6 and 7	
		Does the AO record identified errors in their data and can they demonstrate the consequential corrective measures taken?	Records.	139/2014 ADR.OPS.A.010 Data quality requirements  73/2010 Annex IV Data Quality Requirements referred to in Articles 6 and 7, Part E and F	
<b>AMC1 ADR.OPS.A.010 (a) 1-3</b>					
15	Do the procedures for maintaining the integrity of aeronautical data: <ul style="list-style-type: none"> <li>• Avoid corruption throughout the processing of the data</li> <li>• Assure corruption does not occur at any stage of the</li> </ul>	Is any aeronautical data being entered manually (i.e. while entering new data items to the existing data set or calculating new data items)? If yes, are independent checks of manually inputted data carried out?	QMS Manual(s) and supporting documents (including WI), FA, metadata.	73/2010 Annex IV Data Quality Requirements referred to in Articles 6 and 7, Part B & E	E.g. An excel spreadsheet or Auto Cad form can be set-up to require double 'blind' entry. That should be reflected in the QMS, FA and metadata.

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	entire process for both essential and critical data?	<p>Does the AO employ validation and verification processes including:</p> <ol style="list-style-type: none"> <li>1) actions to be taken when data fails a verification or validation check;</li> <li>2) tools required for the verification and validation process;</li> <li>3) the methods used to verify received data;</li> <li>4) the methods by which data quality is preserved;</li> <li>5) the means used to:                             <ol style="list-style-type: none"> <li>a. confirm that the data has been received without corruption;</li> <li>b. ensure that stored data is protected from corruptions;</li> <li>c. confirm that originated data has not been corrupted prior to being stored</li> </ol> </li> </ol>	QMS Manual(s) and supporting documents (including WI)	73/2010 Annex I Data set specifications referred to in Article 4, Part C Annex IV Data Quality Requirements referred to in Articles 6 and 7, Part B	
		Prior to the introduction of any new or revised process, does the AO conduct an assessment of the impact of the process, WI or tool to ensure that it does not adversely affect the AI or introduce errors?	QMS Manual(s) and supporting documents (including WI)	73/2010 Article 10 (3&4) Management Requirements	
<b>AMC1 ADR.OPS.A.010 (b)</b>					



# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
16	Does the aerodrome operator ensure that aerodrome-related aeronautical data is determined and reported in accordance with the relevant tables?				
<b>AMC1 ADR.OPS.A.010 (c)</b>					
17	Has the AO confirmed that the accuracy requirements for aeronautical data are based upon a 95% confidence level and that 3 types of positional data are identified: <ul style="list-style-type: none"> <li>• Survey points (eg threshold)</li> <li>• Calculated points (mathematical calculations)</li> <li>• Declared points (eg flight information region (FIR) boundary points?)</li> </ul>				
<b>AMC1 ADR.OPS.A.010 (d)</b>					
18	Has the AO confirmed that the geographical coordinates indicating latitude and longitude are determined and reported to the AIS in terms of the WGS 84?	Does the AO use WGS-84, EGM-96 and UTC?	FA, survey reports, QMS Manual(s) and supporting documents	139/2010 ADR.OPS.A.010 Data quality requirements  73/2010 Annex IV Data Quality Requirements referred to in	In the UK ETRS89 is recognised as the reference frame for establishing positions on the WGS84 geoid. This should be evidenced in the metadata for the feature concerned. Any transformation programs/method used by a surveyor for transformation from OSGB36 to WGS84 should be proven before used in earnest. The

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				Articles 6 and 7, Part D	model used in the UK to represent AMSL is the OSGM02 National geoid model. This should be evidenced in the metadata for the feature concerned.
<b>AMC1 ADR.OPS.A.010 (e)</b>					
19	Has the AO ensured that the navigational data for the phases of flight are within the maximum deviations as indicated in Tables 1-5 of AMC1 ADR.OPS.A.010 (b)?				
<b>AMC1 ADR.OPS.A.010 (f)</b>					
20	Has the AO ensured that the elevation and geoid undulation is determined and reported to the AIS?				
<b>AMC1 ADR.OPS.A.010 (g) &amp; (h)</b>					
21	Has the AO ensured the protection of the electronic aeronautical data whilst stored, or in transit and is totally monitored by the cyclic redundancy check (CRC). (Critical and Essential data – 32bit or 24bit algorithm respectively) (Routine Data – 16 bit algorithm)?	Does the AO use Eurocontrol Data Quality Tool Set (EDQTS) or any other software incorporating a CRC 32 application or zip utility software?	QMS Manual(s) and supporting documents (including WI)/IT Policy/ Testing	73/2010 139/2014 ADR.OPS.A.010 Data quality requirements  Annex VI Data Protection Requirements referred to in Article 9	EDQTS is no longer supported by Eurocontrol and is now unavailable. The use of readily available zip utility software to protect data during transmission should be considered sufficient and it is recommended to be used between the data originator and AIS. There are other solutions available on the market that provide the same level of

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
					protection and can be used in the data chain.
		Does AO ensure that aeronautical data is transmitted by electronic means?	FA, QMS Manual(s) and supporting documents (including WI).	73/2010 Article 5 Data exchange	
		Are all records captured, stored and transmitted digitally?	FA, Survey Report.	73/2010 PART D Data origination	All recorded field observations should be transferred into data processing/verification equipment by digital means
<b>AMC1 ADR.OPS.A.010 (i)</b>					
22	Has the AO implemented procedures to: <ol style="list-style-type: none"> <li>1) Monitor data relevant to the aerodrome and available services originating from the aerodrome operator and promulgated to the air traffic services provider?</li> <li>2) notify the relevant AIS and ATS providers of any changes necessary to ensure correct and</li> </ol>	Is there an established process of monitoring data relevant to the aerodrome and available services originating from the aerodrome operator and promulgated by AIS? Is it clear who is responsible for every activity?	Aerodrome Manual/QMS Manual(s) and supporting documents including WI.	139/2014 ADR.OPS.A.010 Data quality requirements  73/2010 Annex IV Data Quality Requirements referred to in Articles 6 and 7, Part D	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	complete data relevant to the aerodrome and available services?	Is there an established process of notifying AIS of any changes necessary for ensuring correct and complete data set which is relevant to the aerodrome and available services? Is it clear who is responsible for notifying AIS and how AIS is being notified?	Aerodrome Manual/QMS Manual(s) and supporting documents including WI.	139/2014 ADR.OPS.A.010 Data quality requirements	
<b>AMC2 ADR.OPS.A.010 (a)</b>					
23	<p>Does the AO's formal arrangements include organisations with which it exchanges aeronautical data and / or information such as:</p> <ol style="list-style-type: none"> <li>1) air navigation services;</li> <li>2) services for the origination and provision of survey data;</li> <li>3) procedure design services;</li> <li>4) electronic terrain data; and</li> <li>5) electronic obstacle data?</li> </ol>	Are there FAs in place with entities providing: air navigation services (including AIS); services for the origination and provision of survey data; procedure design services; electronic terrain data; and electronic obstacle data, airspace consultants (ACP)?	Signed Formal Arrangements	<p>139/2014 ADR.OPS.A.010 Data quality requirements</p> <p>73/2010 Article 6 Data quality</p>	
<b>AMC2 ADR.OPS.A.010 (b)</b>					

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
24	Does the AO's formal arrangements include:			139/2014 ADR.OPS.A.010 Data quality requirements	See also the guidance on FA for AO and surveyors.
	1) the scope of aeronautical data or aeronautical information to be provided;	Does FA include all required elements?	Signed Formal Arrangements	73/2010  Annex IV Data Quality Requirements referred to in Articles 6 and 7	
	2) the accuracy, resolution, and integrity requirements for each data item supplied ( <i>using CAP1054 / Eurocontrol specifications</i> );				
	3) the required methods for demonstrating that the data provided conforms with the specified requirements;	Are security requirements reflected in the FA?	FA.	ADR.OPS.A.010 Data quality requirements	
	4) the nature of action to be taken in the event of discovery of a data error, or inconsistency in any data provided;	Are there any data origination quality reports available?	Survey report received from the contracted party, Formal Arrangements	139/2010 ADR.OPS.A.010 Data quality requirements  73/2010 Annex IV Data Quality Requirements referred to in Articles 6 and 7, Part C	All originated data shall be evaluated to ensure that it has met the data quality requirements specified in the request for origination. Information about the Quality Principles of spatial data can be found in ISO 19114. Direct methods determine data quality through the comparison of the data with internal and/or external reference information (see also ISO 19114).
	5) the following minimum criteria for notification of data changes:  (5i) criteria for determining the timeliness of data provision based on the operational or safety significance of the change;	What are the contingency/back-up arrangements for any system failure? Is there a contingency plan in place that addresses the arrangements in case of loss or	Contingency plan, reports from a contingency testing.	139/2014 ADR.OPS.A.010 Data quality requirements	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	<p>(5ii) any prior notice of expected changes;</p> <p>(5iii) the means to be adopted for notification;</p> <p>6) the party responsible for documenting data changes</p> <p>7) the means to resolve any potential ambiguities caused where different formats are used to exchange aeronautical data or aeronautical information;</p> <p>8) any limitations on the use of data;</p> <p>9) requirements for the production of quality reports by data providers to facilitate verification of data quality by the data users;</p> <p>10) metadata requirements; and</p> <p>11) contingency requirements concerning the continuity of data provision.</p>	<p>temporary loss of the ability to access or publish data?</p>		<p>73/2010 Annex IV Data Quality Requirements referred to in Articles 6 and 7, Part C</p> <p>Annex VII Quality, Safety and Security Management Requirements referred to in Article 10, Part C</p>	
		<p>Is metadata provided for every data set (item)?</p>	<p>QMS Manual(s) and supporting documents (including WI), FA, survey reports</p>	<p>139/2014 ADR.OPS.A.010 Data quality requirements</p> <p>73/2010 Annex I Part C</p>	<p>ADQ IR Annex I Part C: The metadata for the data set specifications defined in Part A and Part B shall include the following items, as a minimum:</p> <p>(a) the data originator of the data;</p> <p>(b) amendments made to the data;</p> <p>(c) the persons or organisations that have interacted with the data and when;</p> <p>(d) details of any validation and verification of the data that has been performed;</p> <p>(e) effective start date and time of the data;</p> <p>(f) for geospatial data:</p> <ul style="list-style-type: none"> <li>— the earth reference model used,</li> <li>— the coordinate system used;</li> </ul>

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
					(g) for numerical data: — the statistical accuracy of the measurement or calculation technique used, — the resolution, — the confidence level as required by the ICAO standards referred to in points 1 and 12 of Annex III and in other relevant ICAO standards; (h) details of any functions applied if data has been subject to conversion/transformation; (i) details of any limitations on the use of the data.
		Are all instrument flight procedures and airspace structures traceable to their source of production by an unbroken trail recorded as metadata?	FA, ACP/IFP documents (as required by CAP 1616).	139/2014 ADR.OPS.A.010 Data quality requirements  73/2010 Annex I Data Set Specifications referred to in Article 4, Part C	Information to be included in the quality record for IFPs: a) Name of procedure designer; b) Design organisation; c) Date of design; d) Design rationale; e) Version of applicable design criteria used; f) Data sources; g) Parameters used; h) Design assumptions and constraints; i) Name of design validator; j) Date of design approval. Information to be included in the quality record for Airspace Design: a) Name of Airspace Designer; b) Design organisation; c) Date of design

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
					See also ACP supporting documents (metadata template).
		Does the surveyor make the calibration certificates of surveying equipment available upon request?	Survey reports received from the contracted party, Formal Arrangements	139/2014 ADR.OPS.A.010 Data quality requirements	Survey reports should include references to all calibration certificates for equipment used for the surveying of features included in the survey report.
		How does the AO verify compliance with FA requirements?	Survey reports received from the contracted party/audits (periodic reviews), QMS Manual(s)	139/2014 ADR.OPS.A.010 Data quality requirements ADR.OR.D.010 Contracted activities	
<b>AMC 1 ADR.OPS.A.015 (a)</b>					



# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
25	<p>Does the AO have arrangements to report to AIS, with minimum delay, the following:</p> <ol style="list-style-type: none"> <li>1) Construction or maintenance work</li> <li>2) Rough or broken surfaces on a runway, taxiway or apron.</li> <li>3) Snow/slush/ice or frost on a runway, taxiway or apron</li> <li>4) Water on a runway, taxiway or apron.</li> <li>5) Snow banks or drifts adjacent to a runway, taxiway or apron</li> <li>6) Anti-icing or de-icing liquid chemicals or other contaminants on a runway, taxiway or apron</li> <li>7) Other temporary hazards including parked aircraft</li> <li>8) Failure or irregular operation of part or all of the aerodrome visual aids</li> <li>9) Failure of the normal or secondary power supply.</li> </ol>		<p>QMS and supporting documentation (WI); Aerodrome Manual; examples of notifications (reports) sent to AIS.</p>		
<b>AMC 1 ADR.OPS.A.015 (b)</b>					
26	<p>Does the AO advise AIS and the ATS provider of changes to the level of RFFS protection?</p>				

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
<b>ADR.OR.D.007 (a)</b>					
27	Has the AO implemented and maintained a quality management system covering: <ol style="list-style-type: none"> <li>1) Its aeronautical data activities?</li> <li>2) Its aeronautical information provision activities?</li> </ol>	Does the Aerodrome Operator (AO) possess a QMS (ISO or equivalent)?	QMS Manual(s); QMS external and internal audit report; QMS monitoring documents; ISO certificate (if ISO)	139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information  73/2010 Article 10 Management requirements	
		Is there a person appointed within the organisation responsible for monitoring compliance with the QMS?	QMS Manual(s), Job description, monitoring documents.	139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information	
		Does the QMS detail the required accuracy, resolution, and integrity of the AI the party is responsible for?	QMS Manual (s) and supporting documents (including WI).	139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information 73/2010 Annex VII Quality, Safety and Security Management requirements	QMS can refer directly to the relevant requirements and means of compliance i.e. ICAO Aeronautical Data Catalogue and AMC1 ADR.OPS.A.010).

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				referred to in Article 10, Part A, Quality Management System	
<b>AMC 1 ADR.OR.D.007 (a)</b>					
28	Does the system support the origination, production, storage, handling, processing, transfer and distribution of aeronautical data and aeronautical information?		QMS Manual(s) and supporting documents (including WI), quality assurance programme	139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information Annex VII Quality, Safety and Security Management requirements referred to in Article 10, Part A	
		Does the QMS list all the AI requirements (not only the numerical data requirements) and means of compliance relevant for the organisation (Annex 15 / AMC & GM to 139/2012 / ISO Standards / Eurocontrol DAL Specifications / EUROCAE ED-76, ED-77 and ED-99)	QMS Manual(s) and supporting documents (including WI)	139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information  ADR.OPS.A.010 Data Quality Requirements	ED-76 RTCA/EUROCAE ED 76 (Standards for Processing Aeronautical Data) ED-77 RTCA/EUROCAE ED 77 (Standards for Aeronautical Information) ED-99B RTCA/EUROCAE ED 99 (User Requirements for Aerodrome Mapping Information)

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				73/2010 Annex VII, Quality, Safety and Security Management requirements referred to in Article 10	ISO 19110:2005 ISO 19110 Geographic information -- Methodology for feature cataloguing, Edition 1, 2005 ISO 19131:2007 ISO 19131:2007 Geographic Information – Data Product Specifications ISO 9001 ISO 9001 Quality Management Systems – Requirements, Edition 4, November 2008 and as amended by the Corrigendum dated July 2009
		Does the QMS include WI for all stages of AI origination, production, storage, handling, processing, transfer, distribution exchange and storage, together with their associated and assigned personnel responsibilities?	QMS Manual (s).	139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information  73/2010 Annex IV Data Quality Requirements referred to in Articles 6 and 7, Annex VII Quality, Safety and Security Management Requirements	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				referred to in Article 10	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
29	<p>Does the system:</p> <ol style="list-style-type: none"> <li>1) define the quality policy in such a way as to meet the needs of different users as closely as possible?</li> <li>2) include a quality assurance programme that contains procedures designed to verify that all operations are being conducted in accordance with the applicable requirements, standards and procedures, including the relevant requirements of Part-ADR.OPS?</li> <li>3) provide evidence of the functioning of the quality system by means of</li> </ol>	<p>Is there a quality assurance programme that contains procedures designed to verify that all operations are conducted in accordance with the applicable requirements, standards and procedures?</p>	<p>QMS Manual(s) and supporting documents (including WI), quality assurance programme.</p>	<p>139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information</p> <p>Annex VII Quality, Safety and Security Management Requirements referred to in Article 10, Part A</p>	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	<p>manuals and monitoring documents?</p> <p>4) appoint management representatives to monitor compliance with and adequacy of, procedures to ensure safe and efficient operational practices</p> <p>5) perform reviews of the quality system in place and take remedial actions, as appropriate?</p> <p>6) perform reviews of the quality system in place and take remedial actions, as appropriate? (An EN ISO 9001 certificate, issued by an appropriately accredited organisation is considered an Acceptable Means of Compliance)</p>	<p>Are audits (reviews) of the QMS conducted regularly and are appropriate remedial actions taken if necessary?</p>	<p>QMS external and internal audit reports</p> <p>QMS monitoring documents</p> <p>ISO certificate (if ISO)</p>	<p>139/2014 ADR.OR.D.007 (a) Management of aeronautical data and aeronautical information</p> <p>73/2010 Annex VII Quality, Safety and Security Management Requirements referred to in Article 10, Part A, Quality Management System</p>	
<b>AMC 1 ADR.OR.D.007 (b)</b>					
30	<p>Has the AO defined procedures for meeting the safety security management objectives, including objectives to:</p>	<p>Does the security management system define: (1) the procedures relating to data security risk assessment and</p>	<p>SeMS Manual(s)/SMS Manual(s)/QMS Manual(s) and</p>	<p>139/2014 ADR.OR.D.007 (b)</p>	

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
	<p>1) Ensure aeronautical data and information received, produced or otherwise employed is protected from interference and access to it is restricted only to those authorised?</p> <p>2) 2. Ensure the security management measures meet appropriate national, EU or international requirements for critical infrastructure and business continuity and international standards for security management including:</p> <p style="padding-left: 40px;">i) ISO/IEC 17799:2005</p> <p style="padding-left: 40px;">ii) ISO 28000:2007</p> <p>(The relevant certificates issued by an appropriately accredited organisation are considered as an AMC)</p>	<p>mitigation, security monitoring and improvement, security reviews and lesson dissemination;</p> <p>(2) the means designed to detect security breaches and to alert personnel with appropriate security warnings; and</p> <p>(3) the means of controlling the effects of security breaches, identifying recovery action and mitigation procedures to prevent reoccurrence?</p>	<p>supporting documents (including WI).</p>	<p>Management of aeronautical data and aeronautical information 73/2010 Annex VII Quality, Safety and Security Management Requirements referred to in Article 10 Part C</p>	
		<p>Does the AO ensure the security clearance of its personnel with respect to aeronautical data security?</p>	<p>HR Policy/Job Descriptions/SeM S Manual(s) and supporting documents.</p>	<p>139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information</p> <p>73/2010 Article 7(5) Annex VII Quality, Safety And Security Management Requirements referred to in Article 10 Part C</p>	<p>Disclosure Barring Service check is the minimum-security clearance expected for those involved in aeronautical information processes.</p>



# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
		Does the SeMS or QMS include measures to protect aeronautical data against cyber security threats?	SeMS Manual(s)/QMS Manual(s)/IT Policy	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information	
		Does the QMS/SeMS detail the requirements and means of compliance applied for security issues?	QMS Manual(s)/SeMS Manual(s)	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information	Appropriate national, EU, or international requirements for critical infrastructure and business continuity, and international standards for security management, including ISO/IEC 17799:2005 — Information technology — Security techniques — Code of practice for information security management; ISO 28000:2007: — Specification for security management systems for the supply chain.
		Did the AO establish safety and security processes so that data is protected from interference and restricted only to those authorised?	QMS Manual(s) and supporting documents (including WI), SMS Manual, SeMS Manual.	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information 73/2010 ANNEX VI Data Protection Requirements referred to in Article 9	These processes can be part of QMS, SeMS and SMS.

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				Annex VII Quality, Safety And Security Management Requirements referred to in Article 10 Part B/Part C	
		Is there a security management system to ensure the security of operational data it receives, or produces, or otherwise employs, so that access to that operational data is restricted only to those who are authorised?	QMS Manual(s) and supporting documents (including WI), SMS Manual, SeMS Manual	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information 73/2010 Annex VII Quality, Safety And Security Management Requirements referred to in Article 10 Part C	
		Are the systems used to process, exchange and store AI protected from unauthorised access?	System specification, IT Policy/Manuals, testing.	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information 73/2010 ANNEX VI	E.g. password authentication.

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
				DATA PROTECTION REQUIREMENTS REFERRED TO IN ARTICLE 9	
		Are the networks used to exchange AI protected from malicious attack?	IT Policy / Manuals	139/2014 ADR.OR.D.007 Management of Aeronautical Data and Aeronautical Information  73/2010 Annex VI Data Protection requirements referred to in Article 9	E.g. appropriate virus protection and firewall software, or establishment of Virtual Private Network for organisations exchanging a lot of AI such as IFP, survey, or airspace AI.
		Are all login details (to the data system used by the AO or to the AIS portal) protected from unauthorised access?	Testing.	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information 73/2010 Annex VI Data Protection Requirements referred to in Article 9	Login details should not be accessible for unauthorised persons – should not be physically stored (i.e. written down) or saved on devices.

# QB31 – Aerodrome Data & Data Quality Requirements



## Compliance Question Bank

#	Question	Performance Question	Example of Evidence	Requirement	Comment
		Do the personnel involved in any data activities have the expected level of knowledge for data quality requirements and procedures in place?	Training Documents Training Plan Job descriptions Work Instructions	139/2014 ADR.OR.D.007 (b) Management of aeronautical data and aeronautical information  73/2010 Article 7(5)	
<b>ADR.OR.D.035 Record keeping</b>					
30	Has the AO established an adequate system of record keeping?	Does the AO have established processes and facilities for archiving and the back-up of stored data? Is every change to the aeronautical data documented (archived versions must be kept for at least 5 years)?	Aerodrome Manual	139/2014 ADR.OR.D.035 Record keeping  73/2010 Article 9	