

SES	Active					EU+
ITY-ADQ	Ensure quality of aeronautical data and aeronautical information					
REG	ASP	MIL	APO	USE	INT	IND

### Subject matter and scope

\* The extension of the applicability area to non-EU ECAC States that have not signed an aviation agreement with EU, as well as material not included in the legislation, are highlighted in blue font italics.

This SES-related implementation objective is derived from Commission Regulation (EU) No 73/2010 of 26 January 2010 laying down requirements on the quality of aeronautical data and aeronautical information for the single European sky (Official Journal L23/6, dated 27.01.2010). The Regulation lays down the requirements on the quality of aeronautical data and aeronautical information in terms of accuracy, resolution and integrity (Article 1).

It applies to European Air Traffic Management Network (EATMN) systems, their constituents and associated procedures involved in the origination, production, storage, handling, processing, transfer and distribution of aeronautical data and aeronautical information (Article 2, para. 1).

The Regulation applies to the following aeronautical data and aeronautical information (Article 2, para 1):

- the integrated aeronautical information package (IAIP) made available by Member States, with the exception of aeronautical information circulars;
- electronic obstacle and electronic terrain data or elements thereof, where made available by Member States;
- aerodrome mapping data, where made available by Member States.

It applies to ANSPs, AISPs, operators of those aerodromes and heliports for which IFR or Special-VFR procedures have been published in national aeronautical information publications, public or private entities providing services for the origination and provision of survey data, procedure design services, electronic terrain data, electronic obstacle data and manufacturing industry (Article 2, para. 2).

It applies up to the moment when the aeronautical data and/or aeronautical information are made available by the aeronautical information service to the next intended user (Ref. Article 2, para. 3)

The terms used in this objective are defined in Article 2 of Regulation (EC) No 549/2004, complemented by definitions set in Article 3 of Commission Regulation (EU) No 73/2010.

***This SES-related implementation objective does not replace the EC legislation. It aims at facilitating the monitoring and reporting of the implementation of quality of aeronautical data and aeronautical information in terms of accuracy, resolution and integrity in European ATM in line with the EC regulations and through the SES implementation monitoring and reporting mechanism. It supersedes ECIP objective INF05 Improve end-to-end integrity of aeronautical data.***

#### Applicable Area(s)

- 1) EU States
- 2) ECAC States having signed an aviation agreement with the EC

#### Timescales

Entry into force of the regulation:	02/2010
Applicable as from :Article 4, Article 5(1), Article 5(2):	07/2013
Article 5(3) and Article 5(4)(c) applicable as from: :	07/2014
Fully applicable as from:	07/2017

### References

#### European ATM Master Plan relationship

- Ol step - [\[IS-0202\]-Improved Supply Chain for Aeronautical Data through Common Quality Measures](#)
- Ol step - [\[IS-0203\]-Harmonised Aeronautical Information through Common Data Model](#)
- Ol step - [\[IS-0204\]-Facilitated Aeronautical Data Exchanges through Digitalised Information](#)

#### Applicable legislation

Commission Regulation (EU) No 73/2010 of 26 January 2010 laying down requirements on the quality of aeronautical data and aeronautical information for the single European sky.

#### Applicable ICAO Annexes and other references

ICAO Annex 15

### Stakeholder Lines of Action (SLoA) derived from the SES legislation

SLoA ref.	Title	Mandatory completion date
ITY-ADQ-REG01	Verify the compliance with data quality requirements and supervise safety assessments	07/2013
ITY-ADQ-REG02	Verify the establishment of formal arrangements	07/2013 ▲
ITY-ADQ-REG03	Verify the compliance with the common dataset specifications and the data exchange format requirements	07/2014
ITY-ADQ-REG04	Verify that all parties comply with all data requirements	07/2017
ITY-ADQ-ASP01	Implement data quality and process requirements	07/2013 ▲
ITY-ADQ-ASP02	Establish formal arrangements	07/2013 ▲

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ITY-ADQ-ASP03	Establish consistency mechanisms and implement timeliness requirements	07/2013	▲
ITY-ADQ-ASP04	Implement personnel and performance requirements	07/2013	▲
ITY-ADQ-ASP05	Implement a quality management system and fulfil safety and security objectives	07/2013	▲
ITY-ADQ-ASP06	Implement the common dataset and digital exchange format	07/2014	▲
ITY-ADQ-ASP07	Implement all data requirements	07/2017	▲
ITY-ADQ-APO01	Implement data quality and process requirements	07/2013	
ITY-ADQ-APO02	Implement personnel and performance requirements	07/2013	
ITY-ADQ-APO03	Implement a quality management system and fulfil safety and security objectives	07/2013	
ITY-ADQ-APO04	Implement the common dataset and digital exchange format requirements	07/2014	
ITY-ADQ-APO05	Implement all data quality requirements	07/2017	
ITY-ADQ-IND01	Implement data quality and process requirements	07/2013	
ITY-ADQ-IND02	Implement personnel and performance requirements	07/2013	
ITY-ADQ-IND03	Implement a quality management system and fulfil safety and security objectives	07/2013	
ITY-ADQ-IND04	Implement the common dataset and digital exchange format requirements	07/2014	
ITY-ADQ-IND05	Implement all data quality requirements	07/2017	

▲ Applicable to the military.

Description of finalised SLoAs is available on the website at <http://www.eurocontrol.int/essip/>

### **Non-mandatory actions (complementing the SES legislation)**

<u>SLoA Ref.</u>	<u>Title of preparatory, coordination and other non-mandatory actions</u>	<u>Completion date</u>
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None

### **Consultation & Approval**

**Working arrangement in charge**

Outline description approved in:

Latest objective review at expert level in:

**Commitment decision body**

Objective approved/endorsed in:

Latest change to objective approved/endorsed in:

### **Expected performance benefits (for information)**

**Safety** : Improved consistency, reliability and integrity.

**Capacity** : N/A

**Cost effectiveness** : Avoidance of repair, correction and re-work activities at data provider and data user level as a necessary step towards the implementation of system wide information management.

**Environment** : N/A

**Security** : Enhanced security due to the implementation of security requirements.

### **Detailed SLoA descriptions**

ITY-ADQ-REG01	Verify the compliance with data quality requirements and supervise safety assessments	Mandatory completion dates
		07/2013

**Action by :** National Regulatory Authorities

National Supervisory Authorities (NSAs)

**Description & purpose :** Verify that data quality and process requirements are fulfilled in accordance with Article 6 (with the exception of Article 6.3, see ITY-ADQ-REG02) and Annex IV Parts A, B, D, E and F of Regulation 73/2010. Supervise that a safety assessment is conducted in accordance with Article 10 of Regulation 73/2010 and review the safety assessment report. If applicable review the safety arguments. Notify the acceptance of the change to the ANSP/ANS.

**Derogations :** None

**Mandatory supporting material :** None

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Other supporting material :

EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

CHAIN Preliminary Safety Case, Edition 0.4, dated 24.10.2006 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case, Edition 2.3, dated September 2009 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case Guidance, Edition 1.0, December 2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:  
 Quality Requirements (DQR), third quarter 2011.  
 Data Assurance Levels (DAL), fourth quarter 2011.  
 Data Origination (DO) second quarter 2012

Finalisation criteria :

- 1 - An EN ISO 9001 certificate was submitted to the NSA by relevant organisations
- 2 - (For ANSPs, APOs and IND certified as ANS): A safety assessment report, including safety arguments where applicable, received and reviewed
- 3 - (For ANSPs, APOs and IND certified as ANS): Proposed changes accepted and formally notified to the relevant organisation
- 4 - (For ANSPs, APOs and IND certified as ANS): An EC declaration of verification of systems and technical filed containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance received and assessed
- 5 - (For other regulated, non certified parties): A technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was received and assessed

<b>ITY-ADQ-REG02</b>	<b>Verify the establishment of formal arrangements</b>	Mandatory completion dates
		07/2013

Action by :

**National Regulatory Authorities**  
**National Supervisory Authorities (NSAs)**

Description & purpose :

Verify that appropriate formal arrangements, respecting at least the minimum content, are established between the relevant parties in accordance with Article 6.3 and Annex IV Part C of Regulation 73/2010.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

Service Level Agreement - Guidance, Edition 1.0, dated 21.09.2007, available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.3, dated 12.04.2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EAD Data Provider Agreement Template available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 The official version of the signed agreements may be obtained via the relevant national ANSP.

EUROCONTROL Specification for Data Origination (DO) is under development and foreseen to be published in the second quarter 2012.

Finalisation criteria :

- 1 - Formal arrangements were established and signed by relevant parties

<b>ITY-ADQ-REG03</b>	<b>Verify the compliance with the common dataset specifications and the data exchange format requirements</b>	Mandatory completion dates
		07/2014

Action by :

**National Regulatory Authorities**  
**National Supervisory Authorities (NSAs)**

Description & purpose :

Verify that the digital datasets for IAIP, aerodrome mapping, electronic obstacle data, electronic terrain data and metadata are provided in accordance with Article 4 and Annex I of Regulation 73/2010 and that the data exchange format requirements are respected in accordance with Article 5 and Annex II of Regulation 73/2010.

Note 1: Digital NOTAM may be excluded from the data exchange format ref. Article 5 (3) (subject to revision once digital NOTAM work progressed).

Note 2: Electronic obstacle data, electronic terrain data and aerodrome mapping data are optional ref. Article 2 (1, sub-para b-d).

Note 3: The EAD Service as an official centralised source of AIS Data for ECAC is in the scope of ADQ and has to comply with the applicable requirements.

Derogations :

None

Mandatory supporting material :

None

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Other supporting material :

EUROCONTROL Specification for the Electronic Aeronautical Information (eAIP), Edition 2.0, dated 14.02.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:

- Data Assurance Levels (DAL), fourth quarter 2011.
- Aeronautical Information Exchange (AIX), based on AIXM 5.1, second quarter 2012.
- Data Origination (DO) second quarter 2012.

Finalisation criteria :

- 1 - (For ANSPs, APOs and IND certified as ANS): A safety assessment report, including safety arguments where applicable, received and reviewed
- 2 - (For ANSPs, APOs and IND certified as ANS): Proposed changes accepted and formally notified to the relevant organisations
- 3 - (For ANSPs, APOs and IND certified as ANS): An EC declaration of verification of systems and technical filed containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance received and assessed
- 4 - (For other regulated, non certified parties): A technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was received and assessed

<b>ITY-ADQ-REG04</b>	<b>Verify that all parties comply with all data requirements</b>	Mandatory completion dates
		07/2017

Action by :

**National Regulatory Authorities**  
**National Supervisory Authorities (NSAs)**

Description & purpose :

Verify that those aeronautical data and aeronautical information items published before 1 July 2013 and not amended since are brought in line by 30 June 2017, at the latest, and that all parties fulfil the requirements in accordance with Article 14 of Regulation 73/2010.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

None

Finalisation criteria :

- 1 - All parties publishing aeronautical data and/or aeronautical information comply with all the requirements set in Commission Regulation (EU) No 73/2010 and an according statement of compliance was received

<b>ITY-ADQ-ASP01</b>	<b>Implement data quality and process requirements</b>	Mandatory completion dates
		07/2013

Action by :

**AIS Providers**  
**ANS Providers**

Description & purpose :

Implement the data quality, evidence, origination, process, error reporting and rectification requirements in accordance with Article 6 (with the exception of Article 6.3, see: ITY-ADQ-ASP02) and Annex IV Parts A, B, D, E and F of Regulation 73/2010 and provide written evidence that the requirements are met.  
 Validate and verify all tools used to support or automate processes in the origination, production, storage, handling, processing and transfer of aeronautical data and/or aeronautical information in accordance with Article 8 and Annex V of Regulation 73/2010. Protect data against loss or alteration in accordance with Article 9 and Annex VI of Regulation 73/2010.  
 Conduct a safety assessment including hazard identification, risk assessment and mitigation in accordance with Article 10 of Regulation 73/2010 and provide a safety assessment report to the NSA. If applicable provide safety arguments to the NSA.  
 Conduct a verification of the systems demonstrating the conformity with the interoperability, performance and safety requirements in accordance with Article 12 and Annex IX and X of Regulation 73/2010 and draw up an EC declaration of verification of systems together with a technical file.

Derogations :

None

Mandatory supporting material :

None.

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Other supporting material :

EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

CHAIN Preliminary Safety Case, Edition 0.4, dated 24.10.2006 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case, Edition 2.3, dated September 2009 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case Guidance, Edition 1.0, December 2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:  
 Quality Requirements (DQR), third quarter 2011.  
 Data Assurance Levels (DAL), fourth quarter 2011.  
 Data Origination (DO) second quarter 2012.

Finalisation criteria :

- 1 - Data quality requirements were implemented and are documented for verification and audit
- 2 - A safety assessment report, including safety arguments where applicable, was provided to the NSA
- 3 - The introduction of the change into service was accepted by the NSA and a notification of acceptance was received
- 4 - An EC declaration of verification of systems and a technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA

<b>ITY-ADQ-ASP02</b>	<b>Establish formal arrangements</b>	Mandatory completion dates
		07/2013

Action by :

**AIS Providers**  
**ANS Providers**

Description & purpose :

Establish formal arrangements with other relevant parties for the exchange of aeronautical data and/or aeronautical information in accordance with Article 6.3 and Annex IV Part C of Regulation 73/2010.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

Service Level Agreement - Guidance, Edition 1.0, dated 21.09.2007, available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.3, dated 12.04.2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EAD Data Provider Agreement Template available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 The official version of the signed agreements may be obtained via the relevant national ANSP.

EUROCONTROL Specification for Data Origination (DO) is under development and foreseen to be published in the second quarter 2012.

Finalisation criteria :

- 1 - Formal arrangements signed by all relevant parties were established

<b>ITY-ADQ-ASP03</b>	<b>Establish consistency mechanisms and implement timeliness requirements</b>	Mandatory completion dates
		07/2013

Action by :

**AIS Providers**

Description & purpose :

Establish and document mechanisms to ensure consistency and implement the timeliness requirements in accordance with Article 7.1, 7.2 and 7.3 of Regulation 73/2010.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

ADQ Guide Edition 1.4 published in May 2011.

Finalisation criteria :

- 1 - Mechanisms ensuring consistency and, if relevant, annotating AIP items not meeting the data quality requirements were established and documented

<b>ITY-ADQ-ASP04</b>	<b>Implement personnel and performance requirements</b>	Mandatory completion dates
		07/2013

Action by :

**AIS Providers**  
**ANS Providers**

Description & purpose :

Develop and maintain awareness material and implement training and competence requirements in accordance with Article 7.4 and Article 7.5 of Regulation 73/2010.  
 Develop and maintain operating manuals and request security clearances in accordance with Article 13 of Regulation 73/2010.

Derogations :

None

Mandatory supporting material :

Community Specifications/Standards are still to be defined.

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Other supporting material :

AIS Training Development Guidelines, Edition 1.0, dated 02.10.2007 and Common AIS Staff Profiling (CASP), Edition 1.0, dated 18.08.2004 available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.3, dated 12.04.2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html).

Note: An ICAO AIS Training Manual is under development.

Finalisation criteria :

- 1 - Awareness material and training records were published
- 2 - Competence requirements for staff were met
- 3 - Operating manuals were provided
- 4 - Security clearances for authorised staff were provided

<b>ITY-ADQ-ASP05</b>	<b>Implement a quality management system and fulfil safety and security objectives</b>	Mandatory completion dates 07/2013
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Action by :

**AIS Providers**  
**ANS Providers**

Description & purpose :

Implement and maintain a quality management system meeting the safety management and the security management objectives in accordance with Article 10 and Annex VII of Regulation 73/2010.  
Note: An EN ISO 9001 certificate issued by an appropriately accredited organisation shall be considered as a sufficient means of compliance for the quality management system.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

International Organization for Standardization (ISO) 9000 series of quality assurance standards.  
ADQ Guide Edition 1.4 published in May 2011.

Finalisation criteria :

- 1 - A quality management system meeting the safety and security management objectives was implemented, documented and is maintained
- 2 - An EN ISO 9001 certificate was obtained
- 3 - Documentation related to certification has been provided to the NSA
- 4 - Access authorisations were provided

<b>ITY-ADQ-ASP06</b>	<b>Implement the common dataset and digital exchange format</b>	Mandatory completion dates 07/2014
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Action by :

**AIS Providers**  
**ANS Providers**

Description & purpose :

Implement the common dataset, provide and document the IAIP, aerodrome mapping, electronic obstacle data, electronic terrain data and metadata in accordance with Article 4 and Annex I of Regulation 73/2010.  
Implement a common data exchange for IAIP, aerodrome mapping, electronic obstacle data and electronic terrain data allowing digital data exchange and verify that all aeronautical data and aeronautical information within the IAIP, AIP amendments and AIP supplements are made available to the next intended user in accordance with Article 5 and Annex II of Regulation 73/2010.  
Conduct a safety assessment including hazard identification, risk assessment and mitigation in accordance with Article 10 of Regulation 73/2010 and provide a safety assessment report to the NSA. If applicable provide safety arguments to the NSA  
Note 1: Digital NOTAM may be excluded from the data exchange format ref. Article 5 (3) (subject to revision once digital NOTAM work progressed).  
Note 2 Concerning the provision of Electronic obstacle data, electronic terrain data and aerodrome mapping data, refer to Article 2 (paragraph 1, sub-para b-d).  
Note 3: The EAD Service as an official centralised source of AIS Data for ECAC is in the scope of ADQ and has to comply with the applicable requirements.

Derogations :

Refer to Article 15, paragraph 2 of Regulation 73/2010.

Mandatory supporting material :

None

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Other supporting material :

EUROCONTROL Specification for the Electronic Aeronautical Information (eAIP), Edition 2.0, dated 14.02.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

CHAIN Preliminary Safety Case, Edition 0.4, dated 24.10.2006 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case, Edition 2.3, dated September 2009 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case Guidance, Edition 1.0, December 2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:  
 Data Assurance Levels (DAL), fourth quarter 2011.  
 Aeronautical Information Exchange (AIX), based on AIXM 5.1, second quarter 2012.  
 Data Origination (DO) second quarter 2012.

Finalisation criteria :

- 1 - The common dataset and digital exchange format requirements were implemented
- 2 - A safety assessment report, including safety arguments where applicable, was provided to the NSA
- 3 - The introduction of the change into service was accepted by the NSA and a notification of acceptance was received
- 4 - An EC declaration of verification of systems and a technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA

<b>ITY-ADQ-ASP07</b>	<b>Implement all data requirements</b>	<b>Mandatory completion dates</b>
		07/2017

Action by :

**AIS Providers**  
**ANS Providers**

Description & purpose :

At the latest by 30 June 2017, update those aeronautical data and aeronautical information items which were published before 1 July 2013 and not amended since in accordance with Article 14 of Regulation 73/2010.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

None

Finalisation criteria :

- 1 - All electronic data is compliant to all requirements and a statement of compliance was provided to the NSA

<b>ITY-ADQ-APO01</b>	<b>Implement data quality and process requirements</b>	<b>Mandatory completion dates</b>
		07/2013

Action by :

**Aerodrome & heliport Operators for which IFR or Special-VFR procedures have been published in national AIPs**

Description & purpose :

Implement the data quality and data origination requirements in accordance with Article 6 and Annex IV Parts A - F of Regulation 73/2010 and provide written evidence that the requirements are met.  
 Validate and verify all tools used to support or automate processes in the origination, production, storage, handling, processing and transfer of aeronautical data and/or aeronautical information and document the validation in a technical file in accordance with Article 8 and Annex V of Regulation 73/2010. Protect data against loss or alteration in accordance with Article 9 and Annex VI of Regulation 73/2010.  
 Conduct a safety assessment including hazard identification, risk assessment and mitigation in accordance with Article 10 of Regulation 73/2010. If certified as ANS, provide a safety assessment report to the NSA and if applicable provide safety arguments to the NSA.

Derogations :

None

Mandatory supporting material :

None

Other supporting material :

EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

CHAIN Preliminary Safety Case, Edition 0.4, dated 24.10.2006 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case, Edition 2.3, dated September 2009 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case Guidance, Edition 1.0, December 2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:  
 Quality Requirements (DQR), third quarter 2011.  
 Data Assurance Levels (DAL), fourth quarter 2011.  
 Data Origination (DO) second quarter 2012.

<b>ITY-ADQ</b>	<b>Ensure quality of aeronautical data and aeronautical information</b>
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Finalisation criteria :

- 1 - Data quality requirements were implemented and are documented for verification and audit
- 2 - (For APOs certified as ANS): A safety assessment report, including safety arguments where applicable, was provided to the NSA
- 3 - (For APOs certified as ANS): The introduction of the change into service was accepted by the NSA and a notification of acceptance was received
- 4 - (For APOs certified as ANS): An EC declaration of verification of systems and a technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA
- 5 - (For APOs not certified as ANS): A technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA

<b>ITY-ADQ-APO02</b>	<b>Implement personnel and performance requirements</b>	Mandatory completion dates
		07/2013

Action by : **Aerodrome & heliport Operators for which IFR or Special-VFR procedures have been published in national AIPs**

Description & purpose : Develop and maintain awareness material and implement training and competence requirements in accordance with Article 7.4 and Article 7.5 of Regulation 73/2010.  
Develop and maintain operating manuals and request security clearances in accordance with Article 13 of Regulation 73/2010.

Derogations : None

Mandatory supporting material : None

Other supporting material : AIS Training Development Guidelines, Edition 1.0, dated 02.10.2007 and Common AIS Staff Profiling (CASP), Edition 1.0, dated 18.08.2004 available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.3, dated 12.04.2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

Note: An ICAO AIS Training Manual is under development

Finalisation criteria :

- 1 - Awareness material and training records were published
- 2 - Competence requirements for staff were met
- 3 - Operating manuals were provided
- 4 - Security clearances for authorised staff were provided

<b>ITY-ADQ-APO03</b>	<b>Implement a quality management system and fulfil safety and security objectives</b>	Mandatory completion dates
		07/2013

Action by : **Aerodrome & heliport Operators for which IFR or Special-VFR procedures have been published in national AIPs**

Description & purpose : Implement and maintain a quality management system meeting the safety management and the security management objectives in accordance with Article 10 and Annex VII of Regulation 73/2010.  
Note: An EN ISO 9001 certificate issued by an appropriately accredited organisation shall be considered as a sufficient means of compliance for the quality management system.

Derogations : None

Mandatory supporting material : None

Other supporting material : International Organization for Standardization (ISO) 9000 series of quality assurance standards.  
ADQ Guide Edition 1.4 published in May 2011.

Finalisation criteria :

- 1 - A quality management system meeting the safety and security management objectives was implemented, documented and is maintained
- 2 - An EN ISO 9001 certificate was obtained
- 3 - Documentation related to certification has been provided to the NSA
- 4 - Access authorisations were provided

<b>ITY-ADQ-APO04</b>	<b>Implement the common dataset and digital exchange format requirements</b>	Mandatory completion dates
		07/2014

Action by : **Aerodrome & heliport Operators for which IFR or Special-VFR procedures have been published in national AIPs**



<b>ITY-ADQ</b>	<b>Ensure quality of aeronautical data and aeronautical information</b>
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**Description & purpose :** Implement the common dataset, provide and document the IAIP, aerodrome mapping, electronic obstacle data, electronic terrain data and metadata in accordance with Article 4 and Annex I of Regulation 73/2010.  
 Implement a common data exchange for IAIP, aerodrome mapping, electronic obstacle data and electronic terrain data allowing digital data exchange and verify that all aeronautical data and aeronautical information within the IAIP, AIP amendments and AIP supplements are made available to the next intended user in accordance with Article 5 and Annex II of Regulation 73/2010.  
 Conduct a safety assessment including hazard identification, risk assessment and mitigation in accordance with Article 10 of Regulation 73/2010. If certified as ANS, provide a safety assessment report to the NSA and if applicable provide safety arguments to the NSA.  
 Note 1: Digital NOTAM may be excluded from the data exchange format ref. Article 5 (3) (subject to revision once digital NOTAM work progressed).  
 Note 2: Electronic obstacle data, electronic terrain data and aerodrome mapping data are optional ref. Article 2 (1, sub-para b-d).  
 Note 3: The EAD Service as an official centralised source of AIS Data for ECAC is in the scope of ADQ and has to comply with the applicable requirements.

**Derogations :** None

**Mandatory supporting material :** None

**Other supporting material :** EUROCONTROL Specification for the Electronic Aeronautical Information (eAIP), Edition 2.0, dated 14.02.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

CHAIN Preliminary Safety Case, Edition 0.4, dated 24.10.2006 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case, Edition 2.3, dated September 2009 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case Guidance, Edition 1.0, December 2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:  
 Data Assurance Levels (DAL), fourth quarter 2011.  
 Aeronautical Information Exchange (AIX), based on AIXM 5.1, second quarter 2012.  
 Data Origination (DO) second quarter 2012.

**Finalisation criteria :**

- 1 - The common dataset and digital exchange format requirements were implemented
- 2 - (For APOs certified as ANS): A safety assessment report, including safety arguments where applicable, was provided to the NSA
- 3 - (For APOs certified as ANS): The introduction of the change into service was accepted by the NSA and a notification of acceptance was received
- 4 - (For APOs certified as ANS): An EC declaration of verification of systems and a technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA
- 5 - (For APOs not certified as ANS): A technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA

<b>ITY-ADQ-APO05</b>	<b>Implement all data quality requirements</b>	Mandatory completion dates
		07/2017

**Action by :** Aerodrome & heliport Operators for which IFR or Special-VFR procedures have been published in national AIPs

**Description & purpose :** At the latest by 30 June 2017, update those aeronautical data and aeronautical information items which were published before 1 July 2013 and not amended since in accordance with Article 14 of Regulation 73/2010.

**Derogations :** None

**Mandatory supporting material :** None

**Other supporting material :** None

**Finalisation criteria :** 1 - All electronic data is compliant to all requirements and a statement of compliance was provided to the NSA

<b>ITY-ADQ-IND01</b>	<b>Implement data quality and process requirements</b>	Mandatory completion dates
		07/2013

**Action by :** Public/private entities providing services for the origination/provision of survey, electronic terrain & obstacle data data and procedures design services

<b>ITY-ADQ</b>	<b>Ensure quality of aeronautical data and aeronautical information</b>
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**Description & purpose :** Implement the data quality and data origination requirements in accordance with Article 6 and Annex IV Parts A - F of Regulation 73/2010 and provide written evidence that the requirements are met.  
 Validate and verify all tools used to support or automate processes in the origination, production, storage, handling, processing and transfer of aeronautical data and/or aeronautical information in accordance with Article 8 and Annex V of Regulation 73/2010. Protect data against loss or alteration in accordance with Article 9 and Annex VI of Regulation 73/2010.  
 Conduct a safety assessment including hazard identification, risk assessment and mitigation in accordance with Article 10 of Regulation 73/2010. If certified as an ANS, provide a safety assessment report to the NSA and if applicable provide safety arguments to the NSA.  
 Assess the conformity or suitability for use of constituents in accordance with Article 11 and Annex VIII of Regulation 73/2010 and issue an EC declaration of conformity or suitability for use of constituents together with a technical file.

**Derogations :** None

**Mandatory supporting material :** None

**Other supporting material :** EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines on Conformity Assessment for the interoperability Regulation of the single European sky, Edition 2.0, dated 02.03.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

CHAIN Preliminary Safety Case, Edition 0.4, dated 24.10.2006 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case, Edition 2.3, dated September 2009 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EAD Safety Case Guidance, Edition 1.0, December 2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

EUROCONTROL Specifications are under development and foreseen to be published as follows:  
 Quality Requirements (DQR), third quarter 2011.  
 Data Assurance Levels (DAL), fourth quarter 2011.  
 Data Origination (DO) second quarter 2012

**Finalisation criteria :**

- 1 - Data quality requirements were implemented and are documented for verification and audit
- 2 - (For IND certified as ANS): The introduction of the change into service was accepted by the NSA and a notification of acceptance was received
- 3 - (For IND certified as ANS): An EC declaration of verification of systems and a technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA
- 4 - (For IND not certified as ANS): A technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA
- 5 - (For Manufacturers of constituents): An EC declaration of conformity of constituents or of suitability for use was issued
- 6 - (For IND certified as ANS): A safety assessment report, including safety arguments where applicable, was provided to the NSA

<b>ITY-ADQ-IND02</b>	<b>Implement personnel and performance requirements</b>	Mandatory completion dates
		07/2013

**Action by :** Public/private entities providing services for the origination/provision of survey, electronic terrain & obstacle data data and procedures design services

**Description & purpose :** Develop and maintain awareness material and implement training and competence requirements in accordance with Article 7.4 and Article 7.5 of Regulation 73/2010.  
 Develop and maintain operating manuals and request security clearances in accordance with Article 13 of Regulation 73/2010.

**Derogations :** None

**Mandatory supporting material :** None

**Other supporting material :** AIS Training Development Guidelines, Edition 1.0, dated 02.10.2007 and Common AIS Staff Profiling (CASP), Edition 1.0, dated 18.08.2004 available at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
 EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.3, dated 12.04.2010 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)

Note: An ICAO AIS Training Manual is under development.

**Finalisation criteria :**

- 1 - Awareness material and training records were published
- 2 - Competence requirements for staff were met
- 3 - Operating manuals were provided
- 4 - Security clearances for authorised staff were provided

<b>ITY-ADQ-IND03</b>	<b>Implement a quality management system and fulfil safety and security objectives</b>	Mandatory completion dates
		07/2013

<b>ITY-ADQ</b>	<b>Ensure quality of aeronautical data and aeronautical information</b>
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**Action by :** Public/private entities providing services for the origination/provision of survey, electronic terrain & obstacle data data and procedures design services

**Description & purpose :** Implement and maintain a quality management system meeting the safety management and the security management objectives in accordance with Article 10 and Annex VII of Regulation 73/2010

**Derogations :** None

**Mandatory supporting material :** None

**Other supporting material :** International Organization for Standardization (ISO) 9000 series of quality assurance standards. ADQ Guide Edition 1.4 published in May 2011.

**Finalisation criteria :**

- 1 - A quality management system meeting the safety and security management objectives was implemented documented and is maintained
- 2 - Access authorisations were provided
- 3 - An EN ISO 9001 certificate was obtained
- 4 - Documentation related to certification has been provided to the NSA

<b>ITY-ADQ-IND04</b>	<b>Implement the common dataset and digital exchange format requirements</b>	Mandatory completion dates 07/2014
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**Action by :** Public/private entities providing services for the origination/provision of survey, electronic terrain & obstacle data data and procedures design services

**Description & purpose :** Implement the common dataset, provide and document the IAIP, aerodrome mapping, electronic obstacle data, electronic terrain data and metadata in accordance with Article 4 and Annex I of Regulation 73/2010. Implement a common data exchange for IAIP, aerodrome mapping, electronic obstacle data and electronic terrain data allowing digital data exchange and verify that all aeronautical data and aeronautical information within the IAIP, AIP amendments and AIP supplements are made available to the next intended user in accordance with Article 5 and Annex II of Regulation 73/2010. Conduct a safety assessment including hazard identification, risk assessment and mitigation in accordance with Article 10 of Regulation 73/2010. If certified as an ANS, provide a safety assessment report to the NSA and if applicable provide safety arguments to the NSA.  
Note 1: Digital NOTAM may be excluded from the data exchange format ref. Article 5 (3) (subject to revision once digital NOTAM work progressed).  
Note 2: Concerning the provision of Electronic obstacle data, electronic terrain data and aerodrome mapping data, refer to Article 2 (paragraph 1, sub-para b-d).  
Note 3: The EAD Service as an official centralised source of AIS Data for ECAC is in the scope of ADQ and has to comply with the applicable requirements.

**Derogations :** None

**Mandatory supporting material :** None

**Other supporting material :** EUROCONTROL Specification for the Electronic Aeronautical Information (eAIP), Edition 2.0, dated 14.02.2011 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
EUROCONTROL Guidelines supporting the implementation of the Regulation on Aeronautical Data and Information Quality, Edition 1.4 at [http://www.eurocontrol.int/aim/public/standard\\_page/adq\\_library.html](http://www.eurocontrol.int/aim/public/standard_page/adq_library.html)  
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Aeronautical Information Exchange (AIX), based on AIXM 5.1, second quarter 2012.  
Data Origination (DO) second quarter 2012.

**Finalisation criteria :**

- 1 - The common dataset and digital exchange format requirements were implemented
- 2 - (For IND certified as ANS): A safety assessment report, including safety arguments where applicable, was provided to the NSA
- 3 - (For IND certified as ANS): The introduction of the change into service was accepted by the NSA and a notification of acceptance was received
- 4 - (For IND certified as ANS): An EC declaration of verification of systems and a technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA
- 5 - (For IND not certified as ANS): A technical file containing evidence of compliance with the relevant part of EUROCONTROL specifications or other acceptable means of compliance was submitted to the NSA
- 6 - (For Manufacturers of constituents): An EC declaration of conformity of constituents or of suitability for use was issued

<b>ITY-ADQ-IND05</b>	<b>Implement all data quality requirements</b>	Mandatory completion dates
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ITY-ADQ	Ensure quality of aeronautical data and aeronautical information
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		07/2017
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Action by : **Public/private entities providing services for the origination/provision of survey, electronic terrain & obstacle data data and procedures design services**

Description & purpose : At the latest by 30 June 2017, update those aeronautical data and aeronautical information items which were published before 1 July 2013 and not amended since in accordance with Article 14 of Regulation 73/2010.

Derogations : None

Mandatory supporting material : None

Other supporting material : None

Finalisation criteria : 1 - All electronic data is compliant to all requirements and a statement of compliance was provided to the NSA