Quality management system and its processes.
CANSO QMS Guidance Material

Presenter: Aleksandr ESTROV

CANSO AIM WG Chair

AIS outlook

ICAO
provisions

State
National regulations

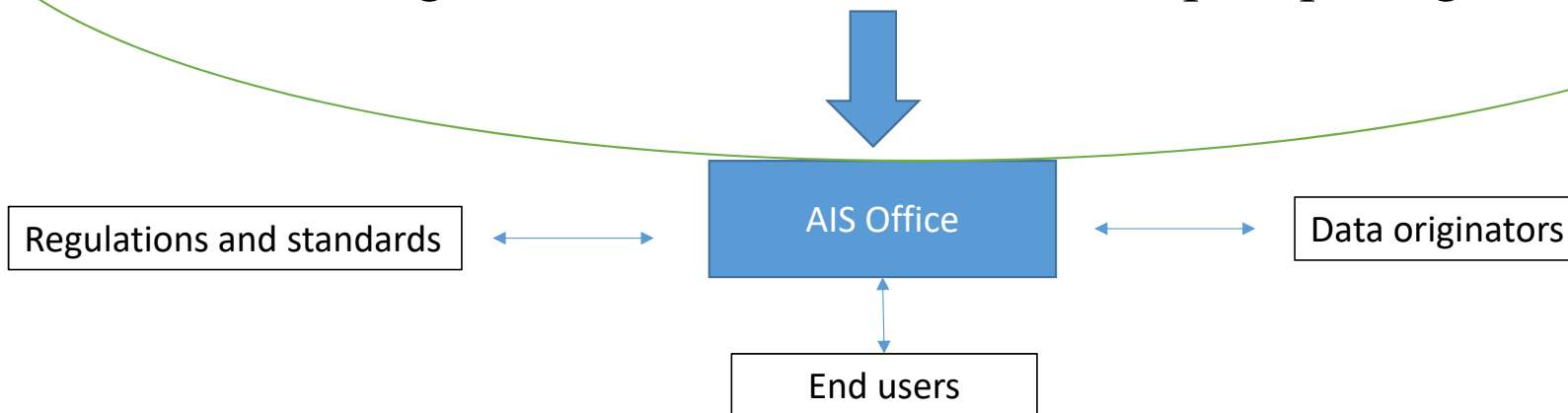ANSP designated
as AIS provider
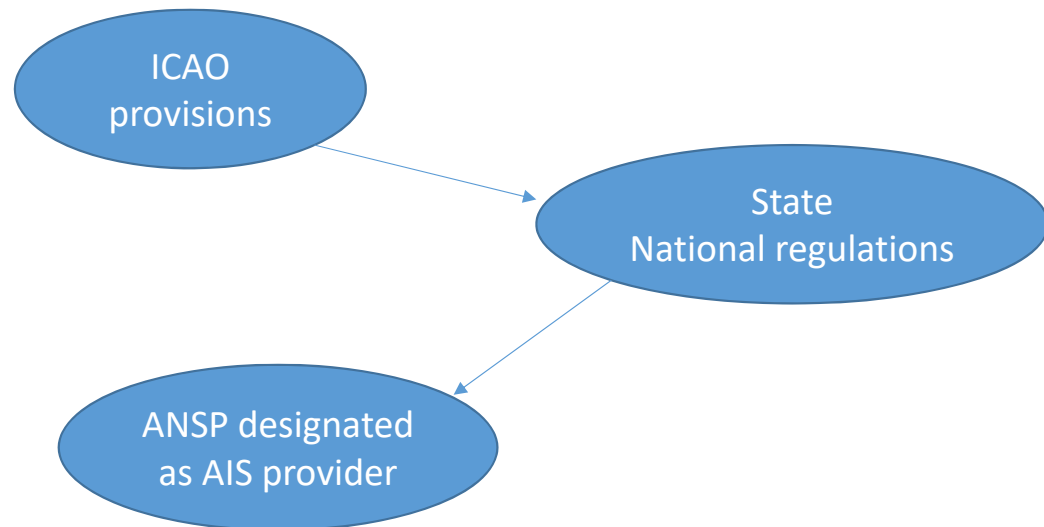
AIS inside overview

Management

AIS staff dealing with aeronautical information and data

AIS staff dealing with chartography

AIS staff dealing with the NOTAMS and ARO plus preflight briefing
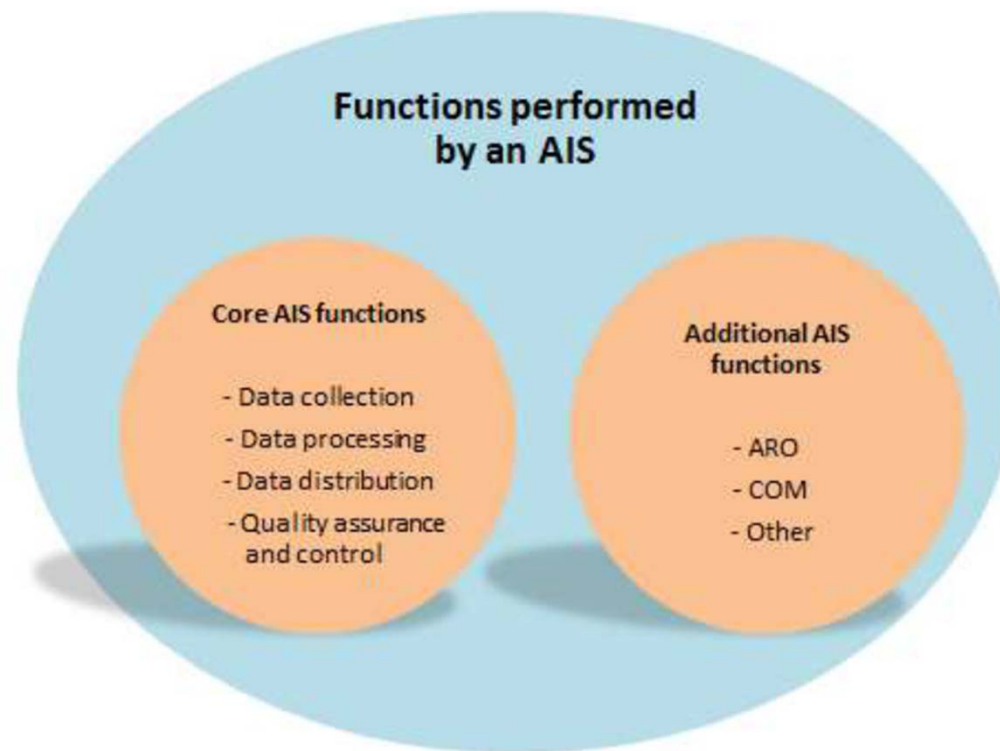
Regulations and standards ←→ AIS Office ←→ Data originators

End users

AIS functions

Functions performed by an AIS

Core AIS functions

- Data collection
- Data processing
- Data distribution
- Quality assurance and control

Additional AIS functions

- ARO
- COM
- Other

AIS models of operation
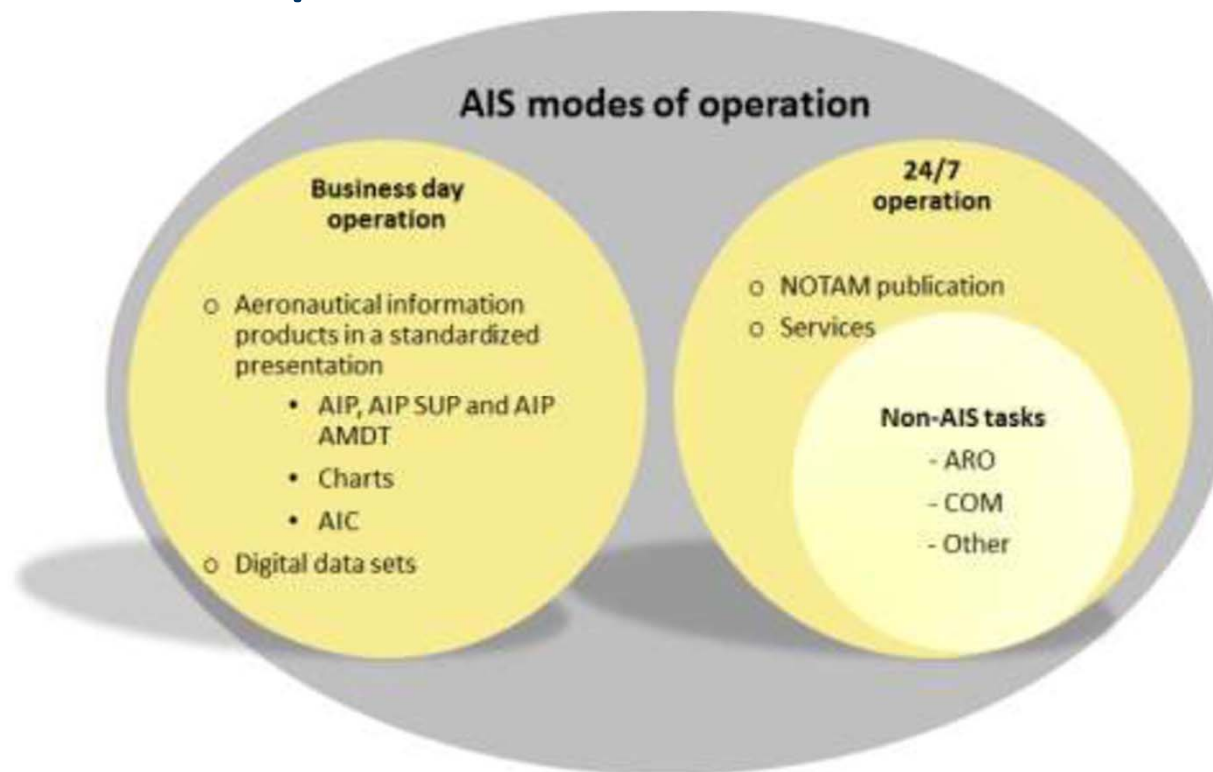
QMS for AIS

- A quality management system consists of a framework of policies, processes and procedures through which an AIS provider manages the inter-related parts of its business to achieve its objectives. The management system that has been implemented can impact aeronautical data quality, aeronautical data and aeronautical information product or service quality and operational efficiency.
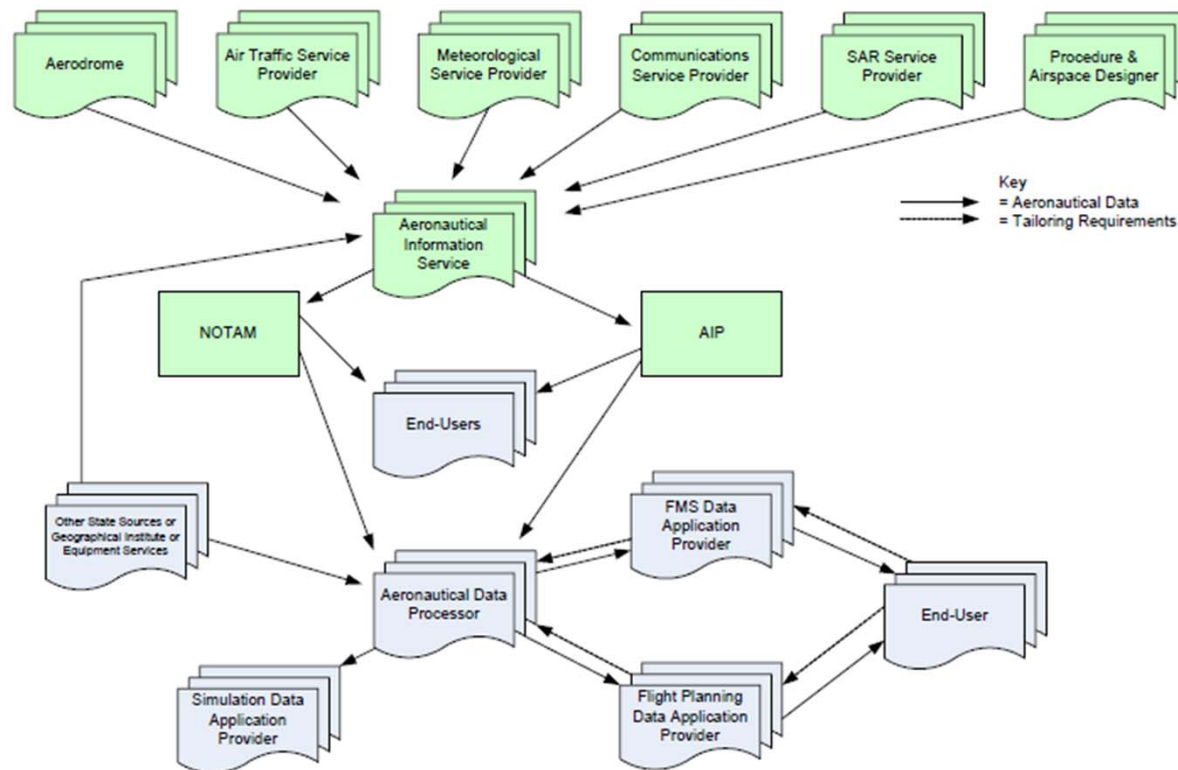
QMS for AIS

- Annex 15 — Aeronautical Information Services requires the AIS provider to implement and maintain a quality management system encompassing all functions of an AIS provider. The implementation of a QMS is critical for the successful transition to data-centric AIM; it ensures that the aeronautical data and aeronautical information provided to the next intended users will comply with specific quality standards. High-quality aeronautical information is essential to the development of interoperable tools that directly support the safe and efficient operation of aircraft.

Aeronautical Data Chain

QMS for AIS

- Annex 15 also recommends that the QMS follows the International Organization for Standardization (ISO) 9000 series of quality assurance standards and that it is certified by an accredited certification body. ISO 9000 defines the QMS as a "management system that directs and controls an organization regarding quality. Activities generally include the following: establishment of a quality policy and quality objectives, quality planning, quality control, quality assurance and quality improvement".

- QMS supports an AIS organization by improving its performance and creating an organizational culture that involves a continuous cycle of self-evaluation, correction and improvement of operations and processes through effective feedback mechanisms. Regular audits are a vital part of the QMS as they enable AIS providers to verify outputs versus objectives and show conformity to the standard.
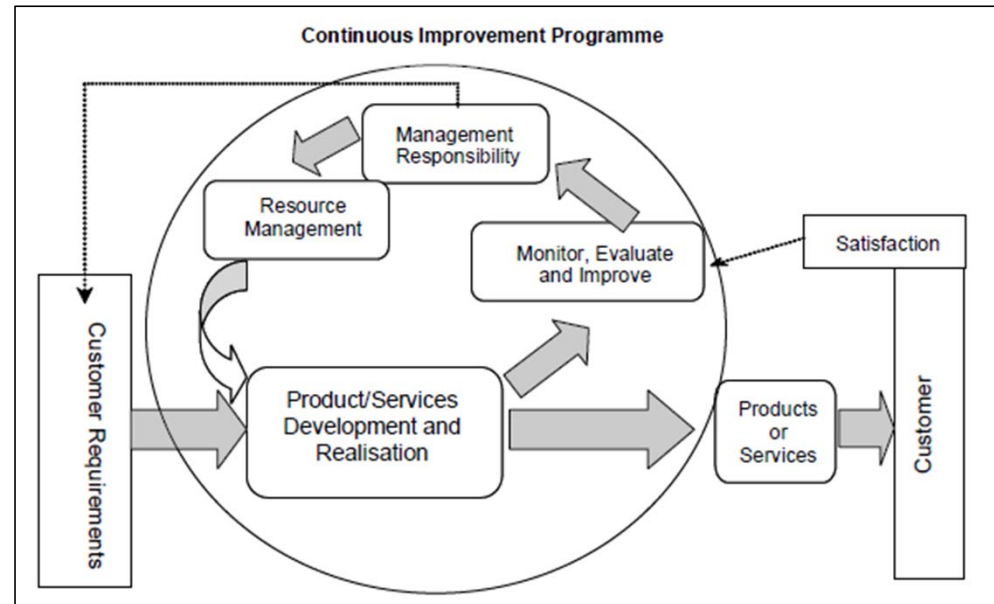
QMS for AIS
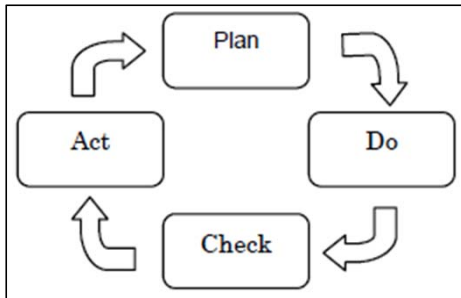
Plan - Plan the improvement

Do - Implement the improvement

Check - Monitor, and measure the results

against policies, objectives and requirements

Act- Take actions to continually improve the

performance

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- ICAO Provisions;
- National legislation;
- Best practices;
- ISO requirements;
- Industry Standards;
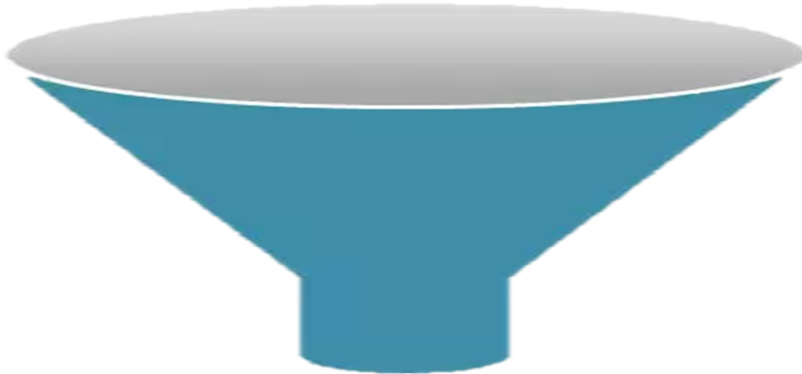- Policies;
- End-users expectations and needs.

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civil air navigation services organisation

Aeronautical Information Management (AIM) Quality Management Development

Guidance Manual

Aeronautical Information Manual (AIM) Quality Management Development Guidance Manual

Document content:

- 10 Chapters (Sections)
- Information about policies, concept, anatomy of the ISO and QMS;
- Explanation about AIS/AIM Processes and Audit activities;
- Steps towards certification;
- Other useful information.

- 8 Appendixes
- Samples;
- Templates;
- Other useful information

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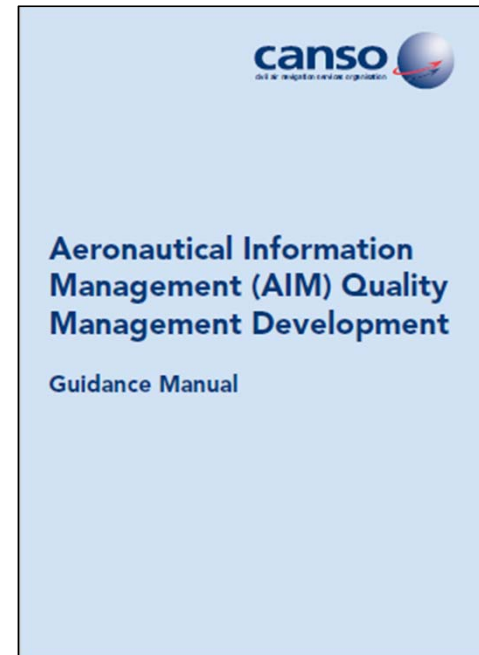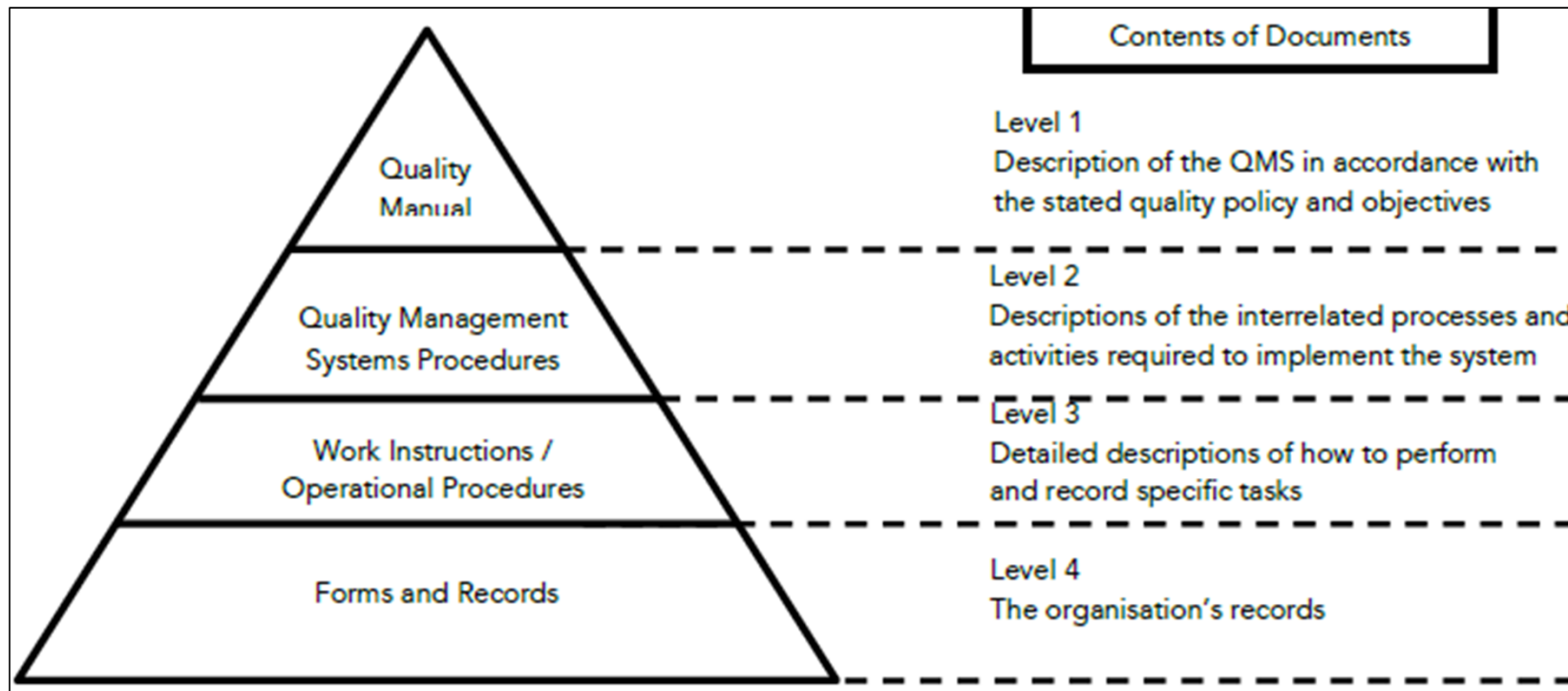
Guidance Manual

Hierarchy of QMS Documentation

Contents of Documents
Level 1 Description of the QMS in accordance with the stated quality policy and objectives
Level 2 Descriptions of the interrelated processes and activities required to implement the system
Level 3 Detailed descriptions of how to perform and record specific tasks
Level 4 The organisation's records

Pyramid levels:
- Quality Manual
- Quality Management Systems Procedures
- Work Instructions / Operational Procedures
- Forms and Records

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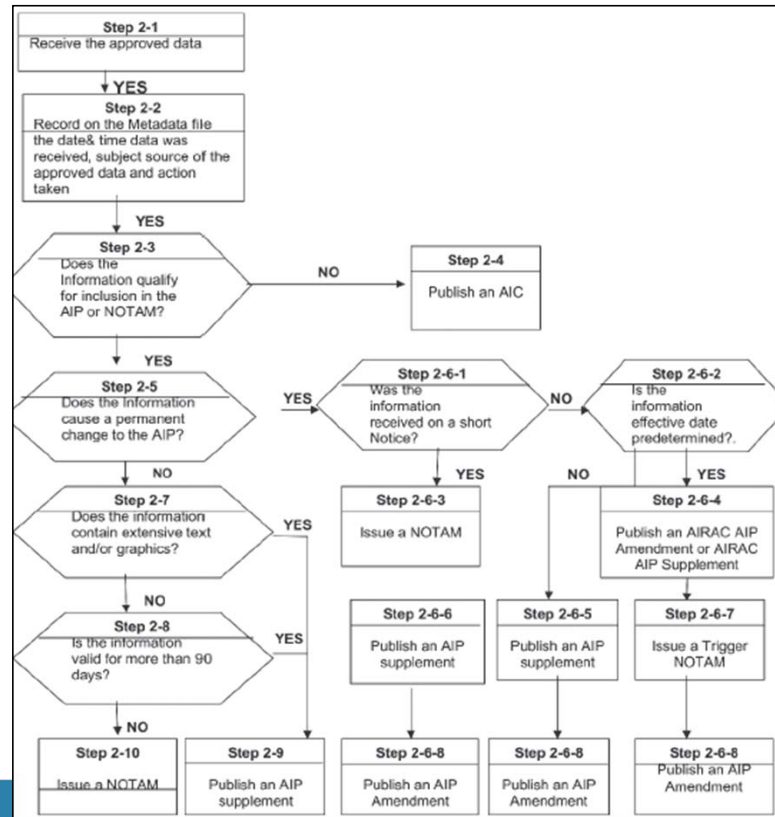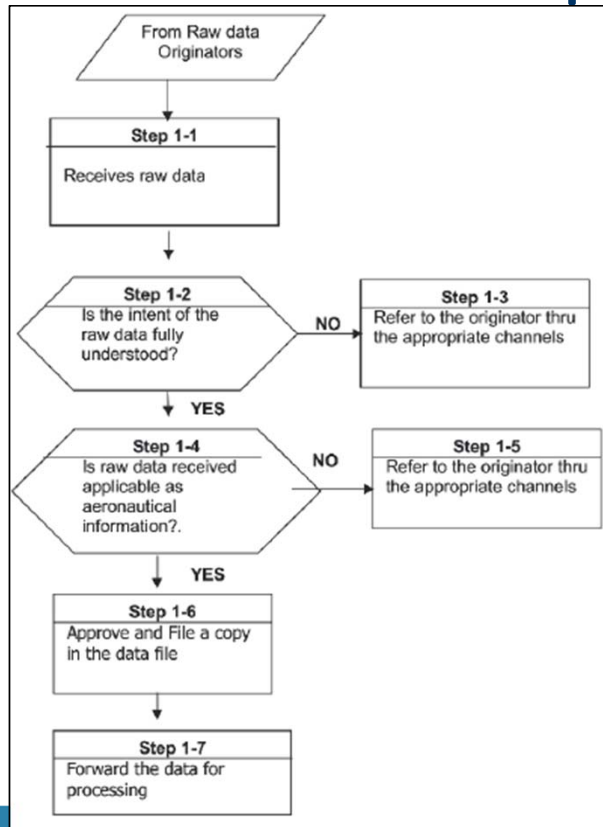Aeronautical Information Management (AIM) Quality Management Development

Guidance Manual

Checklist for the Development of a QMS for AIM

Item	PROGRAMME IN
	PLANN
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8	

Item	PROJECT
	Q
1.	Define roles and responsibilities of the pr
2.	Create the project implementation team
3.	Brief the project implementation team on project and the role of ISO
4.	Arrange for ISO training of all team memb
5.	Assign tasks with specific outcomes and c

Item	GAP ANALYSIS
	QUALITY RESOURCES (WITH THE ASSISTANCE OF THE PROJECT IMPLEMENTATION TEAM)
1.	List the functional groups of AIM and its organisational structure. Show how the organisational structure of each functional group relates to the others and how the AIM functional groups relate to functional groups outside AIM. (This may be represented best as a flow chart.)
2.	List the activities performed within each functional group.
3.	List the processes involved in each of the activities listed, the inputs and outputs of each process and the sequences of the processes. Describe where inputs are derived from outputs of previous processes and where outputs are linked to succeeding processes.
4.	List the customer requirements (including standards and regulations) and the requirements of other functional groups in AIM. Link the processes to these requirements. Note processes that serve neither customers nor other AIM functional groups. Note where processes are still needed to meet requirements. Note where processes need to be improved or changed in order to be effective.
5.	List the procedures used in each of the processes. Note where procedures are undocumented or non-existent.
6.	List the roles and responsibilities of each person involved. Note the differences between actual

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Q&A Time

THANK YOU

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