Quality Management System (QMS)

Workshop for the development of Operational skills for the transition from AIS to AIM for Civil Aviation Authorities (CAA) and Air Navigation Service Providers

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QMS
Need for a Management System?

- To protect our business/ assets/ reputation/ brand image
    - Business continuity, availability of operational systems
- Best practice / lessons learnt
- To maintain/ increase confidence/ assurance (internal & external – public & stakeholders)
- Better clarity in roles & responsibilities
- Increased complexity and interactions
- Increasing and changing threats and vulnerabilities
- To protect against legal action
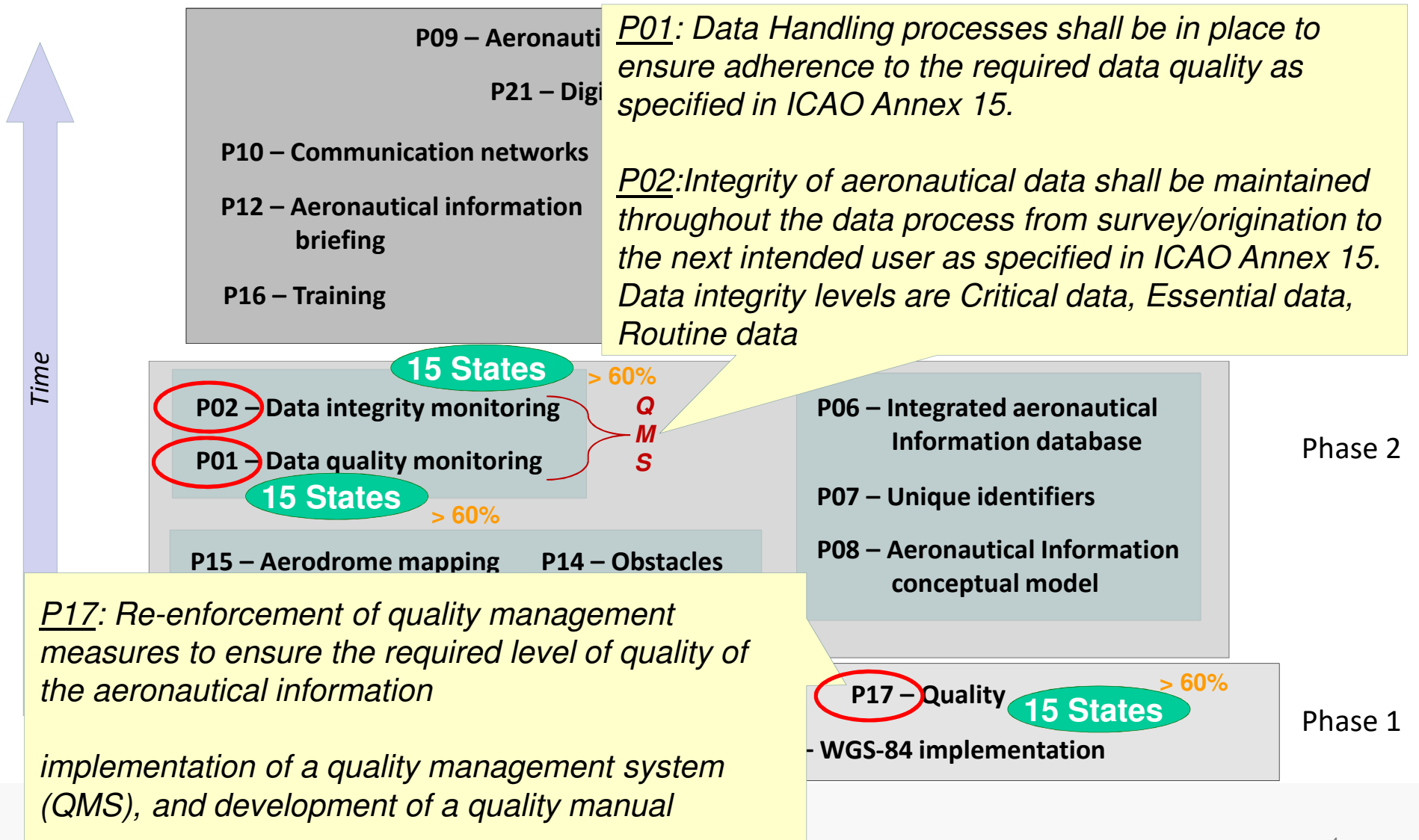- Insurance requirement

AND

- Compliance with regulations

QMS
What is a management system?

- Way in which an organization manages the inter-related parts of its business in order to achieve its objectives
- Formalised : Includes all activities, arrangements and measures that an organization uses to manage and improve its output/ performance.
- More efficient use of resources
- Increased capability to deliver consistent and improved services and products customers
- Proactive approach to managing risks

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AIS to AIM roadmap
WACAF (24 States) transition progress status – *Steps implemented*

Time

P09 – Aeronauti

P21 – Digi

P10 – Communication networks

P12 – Aeronautical information briefing

P16 – Training

P01: Data Handling processes shall be in place to ensure adherence to the required data quality as specified in ICAO Annex 15.

P02: Integrity of aeronautical data shall be maintained throughout the data process from survey/origination to the next intended user as specified in ICAO Annex 15. Data integrity levels are Critical data, Essential data, Routine data

15 States **> 60%**

P02 – **Data integrity monitoring**

P01 – **Data quality monitoring**

Q M S

15 States **> 60%**

P15 – Aerodrome mapping   **P14 – Obstacles**

P06 – Integrated aeronautical Information database

P07 – Unique identifiers

P08 – Aeronautical Information conceptual model

Phase 2

P17: Re-enforcement of quality management measures to ensure the required level of quality of the aeronautical information

implementation of a quality management system (QMS), and development of a quality manual

P17 – **Quality** **> 60%** **15 States**

- WGS-84 implementation

Phase 1

QMS
PANS-AIM Quality management system requirements (chapter 3)

a) Develop a quality manual that includes the scope of the QMS as applied to AIM processes

b) Identify the processes needed for the QMS

c) Determine the sequence and interaction of these processes

d) Determine criteria and methods required to ensure the effective operation and control of these processes

e) Ensure the availability of information necessary to support the operation and monitoring of these processes

f) Measure, monitor and analyse these processes, and implement action necessary to achieve planned results and continual improvement

g) Maintain appropriate records that are necessary to provide confidence of conformity of the processes and resulting product

In the framework of the quality management system, a user feedback system shall be defined and implemented.

QMS
General principle

- Each State shall have a properly organized quality system that contains procedures, processes and resources necessary to ensure the Quality Management (QM) at each stage of data processing

- The State's QMS must be effective and implemented at all stages of the data process, including receiving, originating, collating, assembling, editing, formatting, publishing, storing and distributing the information

- Data must be traceable at any point back through each stage of the process, to the origin

QMS
General principle - Personnel

- The QMS should also include that the personnel to possess and use the skills to operate the QMS.

- Records of qualifications and training shall be maintained of personnel based on the specific function they performed.

- Periodic checks shall be taken to ensure that personnel continue to meet the required standards and if shortfalls are found, corrective measures are taken to correct them.

QMS
General principle - Documentation

- All necessary documents are readily available for reference at the AIS headquarters and at aerodrome/heliport AIS units:

    - In-house manuals and procedure handbooks
    - International standards and guidance material such as the ICAO Documents and Annexes
    - Other publications from IATA, EUROCONTROL, etc.

QMS
Quality Manual - Content

- AIS/AIM Organisation

- Scope (service provided, etc.)

- Quality Policy
  - Commitment to quality, meet customer's expectations, continual improvement, etc.

- Policies, processes, procedures and resources necessary to implement quality management at each function stage of the aeronautical information data chain

- Reference to documented procedures, establishment of responsibilities

- Competencies (skills and knowledge) required for each function shall be identified (Job description)

- Organization and Personnel assigned to perform those functions (process owner, actor(s)

- Performance Indicators associated to the different functions in order to monitor and apply continuous improvements

QMS
Participants feedback – sharing experience

- Describe internal QMS at high level: procedures, processes, etc.

- Interaction with QMS

- KPI in place

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