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**Agenda Item 3: Implementation of the Quality Management System in AIM units**

**AIM QMS IMPLEMENTATION PROCESS IN COLOMBIA**

(Presented by Colombia)

**Summary**

In this paper, Colombia provides information about the process conducted for the implementation of the quality management system, based on the so-called Technical Standard for Public Management (*Norma Técnica de la Gestión Pública*) NTCGP-1000:2009 that the State internally equated to ISO 9001:2008 for public entities.

1.1 Introduction

1.2 It is important for Colombia to explain and let neighbouring countries of the Region know how the guidance provided in NTCGP-1000:2009 promotes the adoption of a process-based approach that consists in the identification and effective management of a set of interrelated activities.

1.3 An advantage of this approach is the continuous control it provides over the linkage amongst individual processes that are part of a system made up by processes, and their corresponding combinations and interactions.

1.4 QMS implementation based on NTCGP-1000:2009 **will permit compliance with international standard ISO 9001:2008**, since it adjusts the terminology and requirements of the latter to its specific application in the entities. However, this standard incorporates requirements and concepts not included in the ISO standard.

1.5 Based on the above and pursuant to the recommendations of the “Guidance Manual for the Implementation of a Quality Management System for AIM in the SAM Region”, Colombia has taken the necessary steps to introduce a duly organised quality system with the procedures, processes, and resources required for the implementation of quality management in each functional stage of AIM.

## 1.6 Discussion

1.7 Pursuant to the recommendations made by ICAO to our State on the implementation of an AIS quality management system, and taking into account that such system is a prerequisite for the transition to AIM, the *Aeronáutica Civil de Colombia* is committed to the guidelines set forth in the various reports. Thus, at present, AIM has a technical team responsible for following up its activities, in accordance with the respective specifications, based on technical standard NTCGP-1000:2009 and on ISO 9001:2008, which applies to Process Letter GSAN-2.2 for managing aeronautical information services.

### AIM QUALITY MANAGEMENT SYSTEM IMPLEMENTATION PHASES - COLOMBIA

1.8 With a view to harmonising the six phases identified by ICAO in the AIM Quality Management System Implementation Manual and the implementation method adopted by the *U.A.E. de Aeronáutica Civil de Colombia*, we submit the following framework:

Phases suggested by ICAO for the implementation of an AIM quality management system		Phases adopted in Colombia for the implementation of the AIM quality management system in compliance with NTCGP-1000:2009	
Preparation	<p>Obtain confirmation of the decision by management to implement ISO 9001:2008.</p> <p>Designation by management of the management representative.</p> <p>Establish the work team.</p> <p>Define project objectives and scope.</p> <p>Initial training for the working group on the quality management system, ISO 9000 series of standards, and internal auditor.</p>	NTCGP-1000:2009	<p>The quality management system described in the manual meets the requirements of NTC GP 1000:2009, which regulates the enforcement of law 872 of 2003 and NTC ISO 9001:2008.</p> <p>Management shows its commitment to the development and implementation of the quality management system, and to continuous enhancement of its efficacy, efficiency and effectiveness, through:</p> <ul style="list-style-type: none"> <li>a) The importance of meeting both customer and legal requirements.</li> <li>b) The establishment of the quality policy.</li> <li>c) The assurance that quality objectives will be established.</li> <li>d) The conduction of management reviews.</li> <li>e) The assurance of resource availability.</li> </ul>
Planning	<p>Define the documentary matrix of the project.</p> <p>Define the processes and procedures to be documented.</p>		<p>Management established and maintains the Quality Manual, which includes:</p> <ul style="list-style-type: none"> <li>a) The scope of the quality management system, with the details and justification of any exclusions.</li> </ul>

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	<p>Define the quality policy and its objectives.</p> <p>Establish a timetable for the development and implementation of each element of the quality management system.</p> <p>Define and assign project resources.</p>	NTCGP-1000:2009	<p>b) Documented procedures established for the quality management system.</p> <p>c) A description of the interaction amongst the processes of the quality management system.</p> <p>d) Assignment of financial, human, and operational resources, in accordance with the objectives of the entity. This may be reflected in budgets, requirement plans, contracting plans, etc.</p>
Communication and information	<p>Communicate the plans to all stakeholders in the organisation.</p> <p>Develop a strategy to sensitise all personnel through conference cycles and seminars.</p>	NTCGP-1000:2009	<p>Responsibilities and authorities are defined and communicated within the organisation.</p> <p>The functions, responsibilities and authorities of the personnel involved in the quality management system and its processes are clearly defined.</p> <p>Ensure the existence of effective communication processes between corporate levels and of the various processes for sharing performance-related information. Effective processes include procedures, strategies, or mechanisms, as appropriate for the entity.</p> <p>Awareness raising, personnel training, and team work are encouraged as a pre-condition for the operation of the quality management system.</p>
Application	<p>Drafting of a quality manual, procedures and technical instructions</p> <p>Training and information for those involved in processes and procedures.</p> <p>Introduction of modifications and adjustments to processes and procedures.</p> <p>Process and procedure implementation sessions.</p>	NTCGP-1000:2009	<p>Process letter GSAN-2.2 “Management of AIM Aeronautical Information Services” especially containing:</p> <ul style="list-style-type: none"> <li>• Process characteristics</li> <li>• Description</li> <li>• Risk map</li> <li>• Value analysis</li> <li>• Control plan</li> <li>• Management indicators</li> <li>• Identification of the documentation required to support the process.</li> </ul> <p>The Basic Procedures are mandatory provisions for the operation of the Quality</p>

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Application	<p>Act according to the implemented procedures.</p> <p>Create records, corrective and preventive action. Conduct internal audits and other measurements to measure the efficiency and efficacy of processes.</p> <p>Correct non-conformities and application of the continuous improvement process.</p>	NTCGP-1000:2009	<p>Management System, and are contained in the respective process letter:</p> <ul style="list-style-type: none"> <li>• Internal quality audit procedure.</li> <li>• Document control procedure.</li> <li>• Record control procedure</li> <li>• Non-conforming product and/or service procedure.</li> <li>• Continuous improvement procedure</li> </ul> <p>Continuous quality improvement is based on the follow-up and analysis of process efficacy, efficiency and effectiveness on an on-going basis.</p>
Certification	<p>Select the certifying entity.</p> <p>Consider conducting a pre-audit.</p> <p>Correct non-conformities. Certification audit.</p> <p>Obtain the certificate.</p>	NTCGP-1000:2009	<p>In order to obtain the appropriate QMS certification, <i>Aeronáutica Civil de Colombia</i> will hire a certifying company to issue the two NTCGP-1000:2009 and ISO9001-2008 concepts in the AIM title.</p> <p>The Directorate defined the internal audit programme to assess the efficacy, efficiency, and effectiveness of the management system and the ability to provide products and/or services that respond to customer needs and expectations, and to ensure compliance with the policies and guidelines of the quality organisation, as the basis for the formulation of continuous improvement actions.</p>
Maintenance	<p>Follow-up of non-conformities</p> <p>Follow-up of the continuous improvement process</p> <p>Conduction of periodic internal audits and management reviews</p>	NTCGP-1000:2009	<p>In order to expedite the external assessment of services, the specific attributes or characteristics of the products delivered in each process have been identified, which generally permits an assessment of customer satisfaction with respect to the services used.</p> <p>Input data for QMS review and maintenance includes:</p> <ol style="list-style-type: none"> <li>a) Audit results</li> <li>b) Customer feedback</li> <li>c) Process performance and product and/or service conformity</li> <li>d) The status of implementation of corrective and preventive actions</li> <li>e) Follow-up of previous management reviews</li> <li>f) Changes that might affect the quality management system</li> </ol>

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			g) Recommendations for improvement

## **SUPPLEMENTARY STRUCTURE OF NTCGP1000:2009 AND ISO 9001:2008 STANDARDS:**

### **NTCGP1000:2009:**

- National standard
- Public sector language
- Notes to facilitate interpretation
- 10 principles
- Terms and definitions
- QMS efficacy, efficiency, and effectiveness
- Risks
- Elements in common with MECI

### **ISO 9001:2008:**

- \* International standard
- \* Generic language
- \* Notes to facilitate interpretation
- \* 8 principles
- \* Terms and definitions
- \* QMS efficacy

## **2**

### **CONCLUSIONS**

2.1 Supplemented with the material to be presented by the Colombia AIM representative at the next SAM/AIM/4 meeting, ICAO and the honourable delegates may verify that our State has endeavoured to implement an AIM quality management system, in accordance with the international guidelines of the ISO standard, and is effectively working towards its development and strengthening, with a view to attaining the corresponding certification.