Safety Culture

—

Uwe David Cano Navarro

Safety Management Coordinator,
INAC/Nicaragua

OACI

CONTENTS

Introduction

Introduction

Safety culture has been described as "the way people behave in relation to safety and risks when no one is watching." It is an expression of how the management and employees of an organization perceive, value, and prioritize safety.

ICAO

DOC. 9859

Chapter 3 contains information related to safety culture and explains the importance of measuring this culture in order to strengthen the foundations or pillars of the State Safety Programme, as well as the policies established by the State that are considered important for the maturation of its safety culture.

Culture is also reflected in the extent to which individuals and groups:

a) are aware of the known risks and dangers that the organization and its activities face;

b) how the staff continuously behaves to maintain and improve safety;

c) can access the required resources for safe operations;

d) are willing and able to adapt when facing safety problems;

e) are willing to communicate safety issues; and

f) continuously evaluate behaviors related to safety throughout the organization.
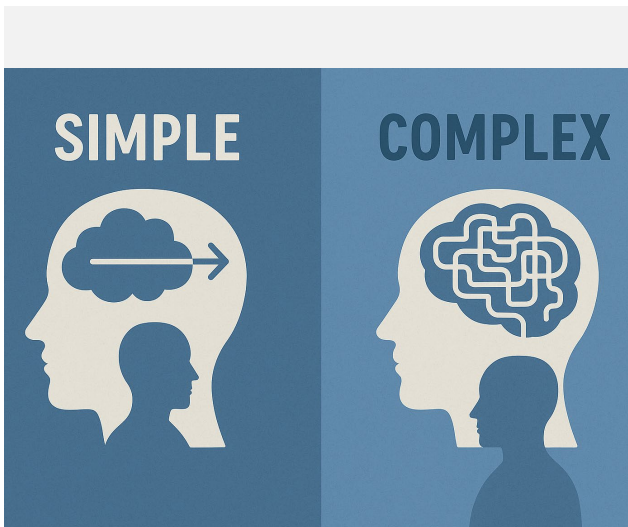
02

Culture and Management

There are no two identical organizations and even within the same organization, different groups may have different ways of thinking about safety, talking about safety, and acting in response to safety issues.

ICAO

If it is thought that safety is not that important, that would lead to:

The application of alternative solutions.

Reductions and simplifications.

Decision-making or uncertain assessments.

The culture and its influence on notifications

A mature safety culture fundamentally depends on its reporting system, and the success of a reporting system relies entirely on the continuous flow of information.

ICAO

Information flow

Signs that safety notifications are supported:

Increase in notifications:
- Institutional errors
- Individual errors
- Confidential

Decrease in anonymous notifications

ICAO

03

Benefits and limitations

- It can improve the relationship between the Authority and its industry.

- Improved communication between inspectors and other personnel with safety responsibilities.

- Provide a greater understanding of the organizational factors that contribute to the overall performance of safety in an aviation authority.

- It can be used as a complementary tool to assess the effectiveness of the SSP.

- The results of a provider could be used as input for risk-based surveillance.
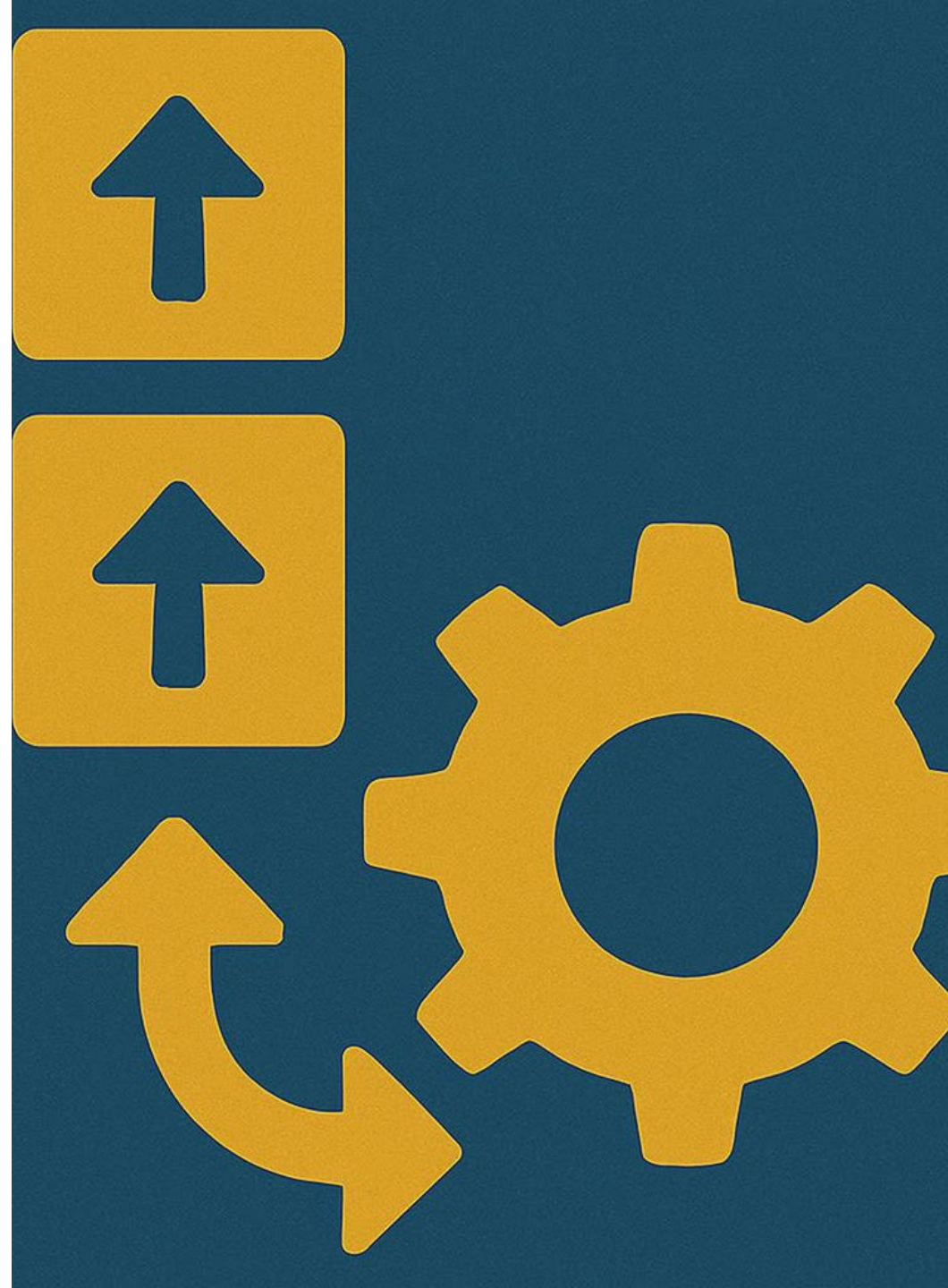
- It allows to identify possible discrepancies or mismatches in the perception of safety between management and staff.

- It generates a comprehensive overview of strengths and weaknesses within an organization.

OACI

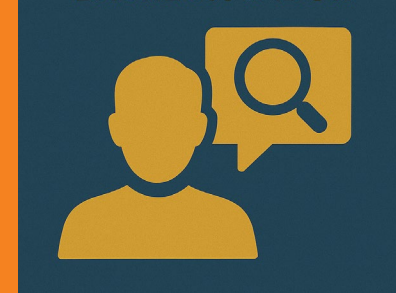# Limitations

SUBJECTIVITY
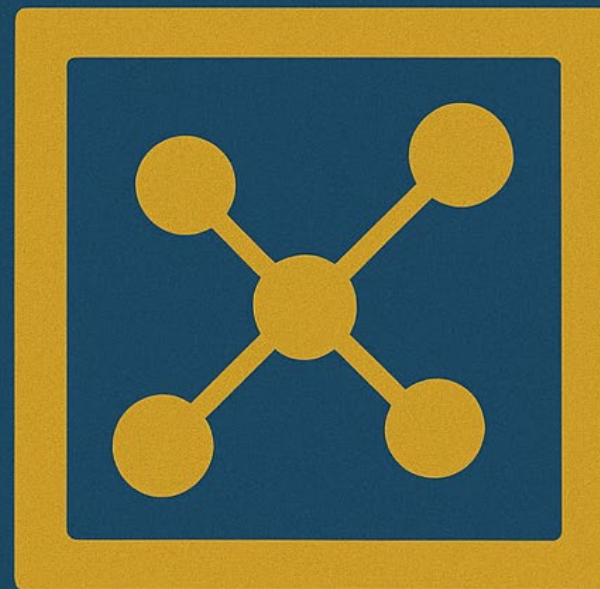

Variability of sample size

Temporality and context

Perception of the interviewers

04

Framework and Characteristics

Framework

For the purposes of the measurement procedure, safety culture will be defined as the set of enduring values, behaviors, and attitudes regarding safety, shared by every member at all levels of the organization.

ICAO

Framework

- A positive safety culture is considered to exist when there is a sense of shared responsibilities to achieve the safety objectives of the AAC or the organization conducting the assessment.

- Responsibility for safety is also promoted, and everyone is in a continuous quest to preserve and improve safety.

- People are willing and trained to adapt when facing safety issues, and they are also willing to communicate such issues.

ICAO

Culture characteristics

Committment

•The degree to which each level of the organization has a positive attitude towards safety and recognizes its importance. Senior management must be genuinely committed to maintaining a high level of safety and motivating staff to do the same.

ICAO

Justice

- The degree to which safe behavior is encouraged or even rewarded, and the reporting of safety issues is fostered, while unsafe behavior is discouraged.

Information

- The extent to which information is distributed to the right people in the organization. Work-related information must be communicated in the correct way to the right people.

Conscience

The extent to which staff and management are aware of the risks to themselves and others involved in the execution of the organization's processes. Staff and management must constantly maintain a high level of surveillance regarding safety.

ICAO

Adaptability
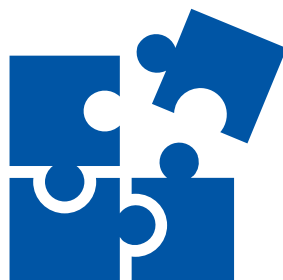
The extent to which the staff and management are willing to learn from past experiences and are able to take the necessary measures to improve the level of safety within the organization.

ICAO

Behaviour

The extent to which each level of the organization acts to maintain and improve the level of safety. From management, the importance of safety must be recognized and everything necessary to maintain and improve safety must be implemented.

ICAO

05

Maturity level indicators

Indicators

It is considered essential to use a hierarchical structure ([1] definition, [2] characteristics, [3] indicators) in order to determine where improvements can be made that contribute to enhancing your safety culture.

Indicators

Characteristic	Indicators
Commitment to Safety	• Management commitment • Personal commitment • Investment in safety
Justness	• Evaluation of (un)safe behavior • Perception of evaluation • Passing of responsibility
Information	• Communication of safety-related information • Safety reporting system • Willingness to report • Consequences of safety reports
Awareness	• Awareness of job-induced risk • Attitude towards unknown hazards • Attention to safety

ICAO

Indicators

Characteristic	Indicators
Adaptability	• Actions after safety occurrences • Proactiveness to prevent safety occurrences • Employee input
Behavior with Respect to Safety	• Working situation • Employee behavior regarding safety • Mutual expectations and encouragement

ICAO

Maturity levels

Evolution of safety culture

Generator

Proactive

Calculator

Reactive

Pathological

Who cares as long as they don't catch us

It is important, we do many things every time there is an accident.

We have systems in place for the management of all risks.

We continue working on problems that we identified.

Safety is our way of doing business here.
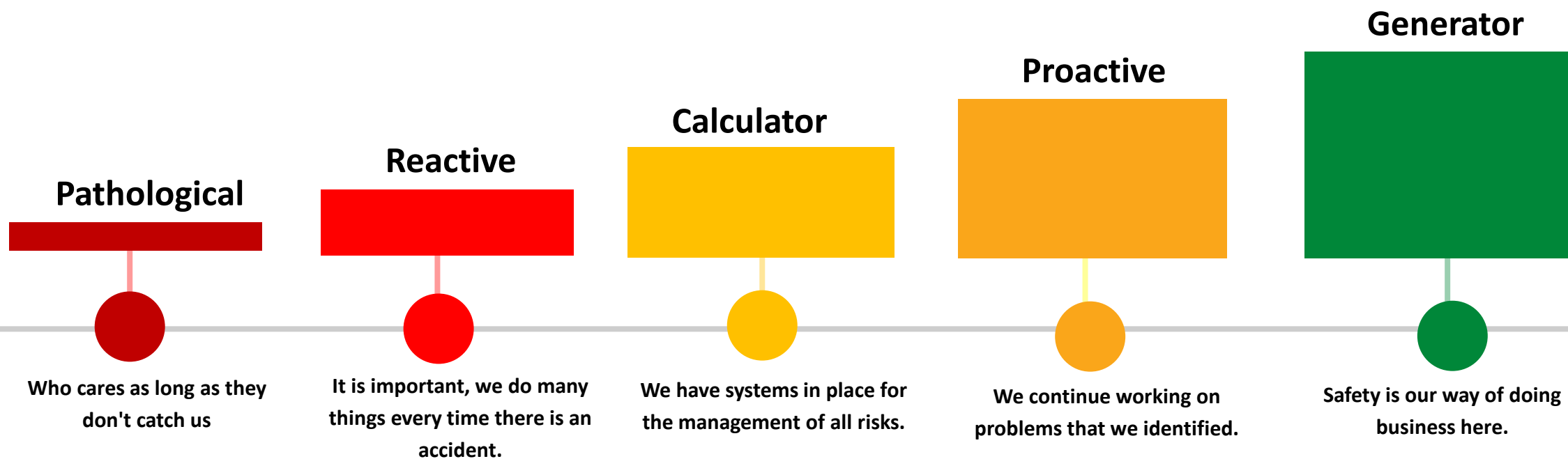
Increase commitment, adaptability, information level, fairness, and maturity of behavior.

OACI

Reactive

In this culture, safety is generally considered a burden imposed by compliance with international standards. Additionally:

1. Actions are taken only to comply with future external audit processes.

2. Actions are taken after a significant safety event.

3. The actions often consist of identifying and punishing the responsible person(s).

4. Only in the case of significant events does it become a priority topic.

Reactive

5. Directors perceive that most incidents are caused exclusively by the unsafe behavior of frontline staff.

6. Unsafe behavior is accepted to complete the work.

Calculator

In this culture, safety is generally considered a factor that must be taken into account:

1. It is considered in the decision-making of Management.

2. However, in itself, safety is not a core value.

3. Directors recognize that a wide range of factors cause unexpected consequences and that root causes often originate from decisions made by Management.

4. An safety reporting system is installed to comply with legal requirements and is only used to collect information.

ICAO

Calculator

4. There is a general awareness of the operational security risks induced by the daily activities of the staff, and the organization is willing to take action only if these become too great.

5. There are situations in which unsafe behavior is accepted to get the job done, but generally, there is a mutual expectation of safe behavior.

Proactive

In this culture, safety is considered a central value:

1. It plays an important role in decision-making at the senior management level, as well as in daily activities.

2. The safety reporting system is used not only to detect significant problems but also those with less evident or negligible impact on safety.

3. Daily activities are regularly evaluated, and actions are reviewed after their implementation.

4. After an event, the primary goal of management is to prevent its recurrence.

5. There is a general awareness of the risks associated with daily activities, and measures are taken to reduce them as much as possible.
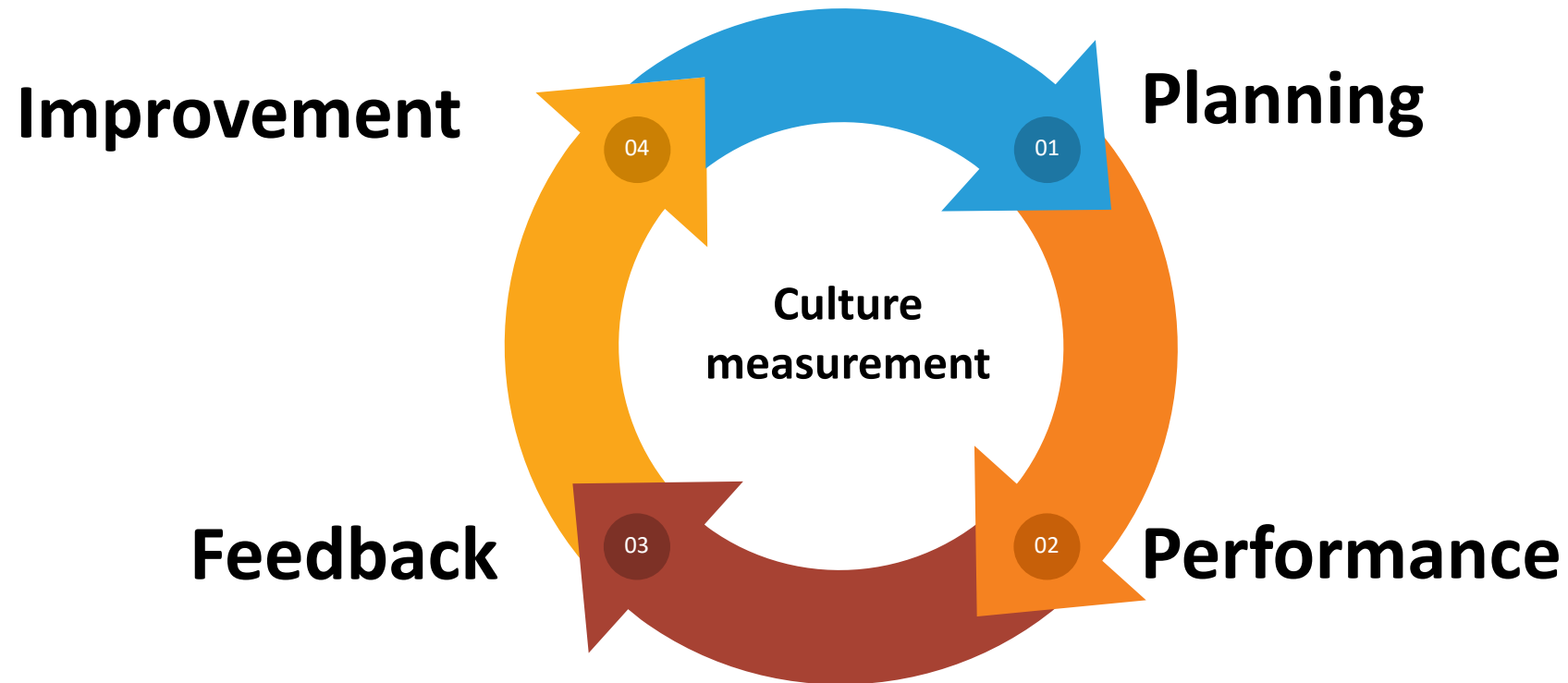
06
Tool

Annex 19 in its numeral 3.2.3.3 "**Recommendation.**— States should establish a safety management policy and objectives that reflect their commitment to safety and promote a positive culture in the aviation community regarding safety."

Document 9859 at the end of its chapter 3 in numeral 3.3.3.2 refers to the fact that 'There are several tools used to assess the level of maturity of the safety culture, usually in combination:

a)   questionnaires;

b)   b) interviews and discussion groups;

c)   c) observations; and

d)   d) document reviews.'

ICAO

How to conduct an assessment to measure the safety culture?

Improvement — 04

Planning — 01

Culture measurement

Feedback — 03

Performance — 02

Planning phase

When planning the evaluation, it is important to consider:

1. Define the sample to be evaluated.

2. Prepare a schedule for the interviews.

3. Notify the involved personnel about the schedule and who will be interviewed.

4. Ensure appropriate rooms for conducting the interviews.

5. Guarantee confidentiality and a relaxed environment.

6. Instruct management that the names of individuals will not be recorded to maintain confidentiality.

7. Instruct senior technicians of the organization to present the evaluation.

ICAO

Instruction and competencies of the interviewers

- Knowledge in SMS.

- Knowledge in SSP and the culture of safety.

- Principles of safety management and evaluation techniques.

- Culture of safety and its key characteristics.

- Familiarization and understanding of the evaluation questions related to the culture of safety.

ICAO

Instruction and competencies of the interviewers

- Human and organizational factors.

- Interview techniques.

- Research techniques.

- Ability to communicate effectively (including active listening).

- Interpersonal skills (ability to relate to diverse groups of people).

- Ability to handle difficult conversations (to avoid conflicts).

ICAO

Performance phase

When the evaluation is conducted, it is important to consider:

1. The interviewers should be familiar with the evaluation procedure of the safety Culture and with the content of the questionnaire.

2. Include the review of previous audits, incident reports, and investigations, as this will allow an assessment of attitudes and behaviors towards safety.

3. Interviewers should limit themselves to asking the questions in the evaluation questionnaire, although they may personalize the way they phrase the question.

4. Avoid guiding the interviewee to give the answers they are looking for.

ICAO

Performance Phase

5. Before each interview, explain the purpose of it and the importance of being open and honest, and that the notes will be kept confidential.

6. Take brief notes of the dialogue during or immediately after each interview.

7. If possible, obtain examples of their experiences whenever possible.

8. Reinforce that there are no right or wrong answers, and the most important thing is to establish a confidential environment during any discussion.

9. No names will be recorded to avoid any actions being taken against individuals based on their comments.

Feedback Phase

1. When all the interviews have been completed, the interviewers must answer the questionnaire and review the results.

2. The feedback meeting is extremely important and the interviewers must be careful when presenting their results thoroughly, clearly, and meticulously.

3. Ideally, for this meeting, the attendance of the responsible executive and technical staff should be ensured.

4. Present the summary and a report of the evaluation.

5. The responsible executive should consider the value of sharing the evaluation results with all staff.

Gracias!

Exercise 1

1. Form work groups.
2. Assign the following roles (2 Interviewers / 1 Director / 1 Inspector).
3. Evaluate one of the 6 characteristics of Culture.
4. Use only the interview guides according to the selected characteristic.
5. Conduct two interviews, one with the Director and one with the Inspector.
6. Using the criteria from the guide, make comments and determine the level (Low/Medium/High) of the selected characteristic.
7. Discuss within the group and compare the results between the Director and the Inspector.
8. Share experiences, challenges, lessons learned, and conclusions with the plenary.

ICAO

Exercise 2

A survey was conducted to assess the safety culture in the civil aviation authority ZZZZ.

1. A total of 10 interviews were conducted (with 5 directors and 5 inspectors).

2. Analyze the results of the survey conducted in the Civil Aviation Authority ZZZZ.

3. According to the summary of the survey, the team should define a confidence level for the safety culture.

4. Based on the overall assessment of each characteristic, actions should be defined to improve.

5. The strategy may include initiatives for outreach, training, or others. 5-8 minutes to present the summary and strategy to the plenary.