



Annexes 11;13 &19 Bridging for Rapid Safety & Prevention Actions

9 November 2023

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■ Presentation Content

- Introduction.
- ICAO Annexes by Function
- Annexes Bridged.
- Case Study (ONGOING).
 - Case Animated Video .
 - ATS Initial Findings*.
 - ANSP Actions.
 - Quick results.



*The case study will only focus on the ATS side of the investigation.

Introduction

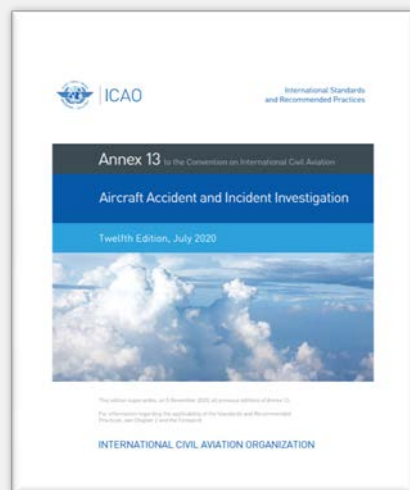
The AIB implemented a process of sharing “early” investigation findings with Air Navigation Service Provider (ANSP) during initial stages of investigations. The result and feedback has been exceptionally encouraging.

This early sharing of findings provided Annex 19 SMS managers a valuable prevention tool allowing for systematic corrections regardless of the final report release-date with report recommendations.

The presentation briefly describes a current on-going investigation reinforcing prevention values gained.



The Annexes by Function

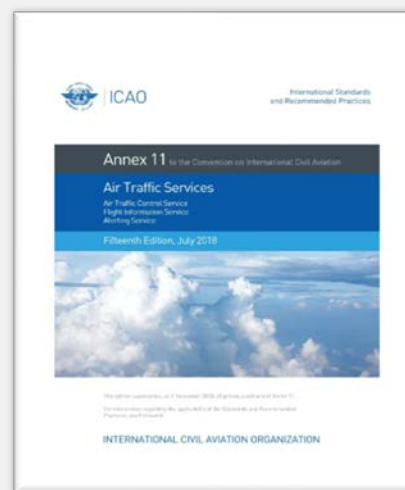


Annex 13

Aircraft Accident and Incident Investigation



Specifies SARPs for accident and serious incident investigations and clarify the roles of participating authorities.



Annex 11

Air Traffic Services



Specifies SARPs for Air Traffic Services implementation, air flow management operation and safety management program.



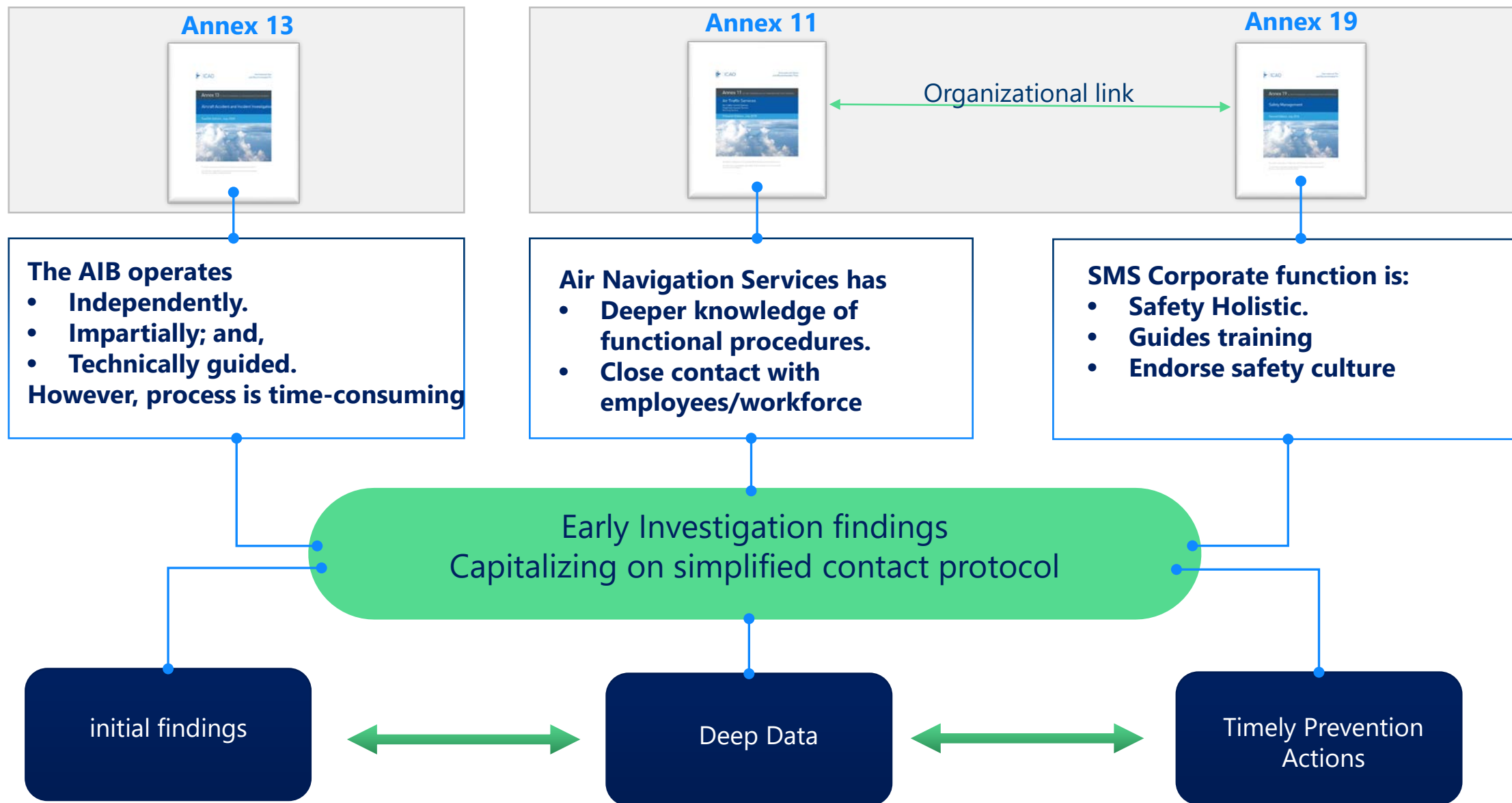
Annex 19

Safety Management



Specifies SARPs for SSP implementation to improve safety performance and facilitate the evolution of safety management provision.

ICAO Annexes Bridged



■ Case Identifier (AIB-220823-1478)

- **Date:** On 22 August 2023.
- **Time:** 21:16 UTC (00:16 Local).
- **Aircraft:** Indigo airlines ,IGO066 (A321-Neo).
- **Route:** Jeddah (OEJN) to Cochin (VOCI).
- **Emergency :** Engine failure - Smoke in the cockpit/cabin during initial climb.



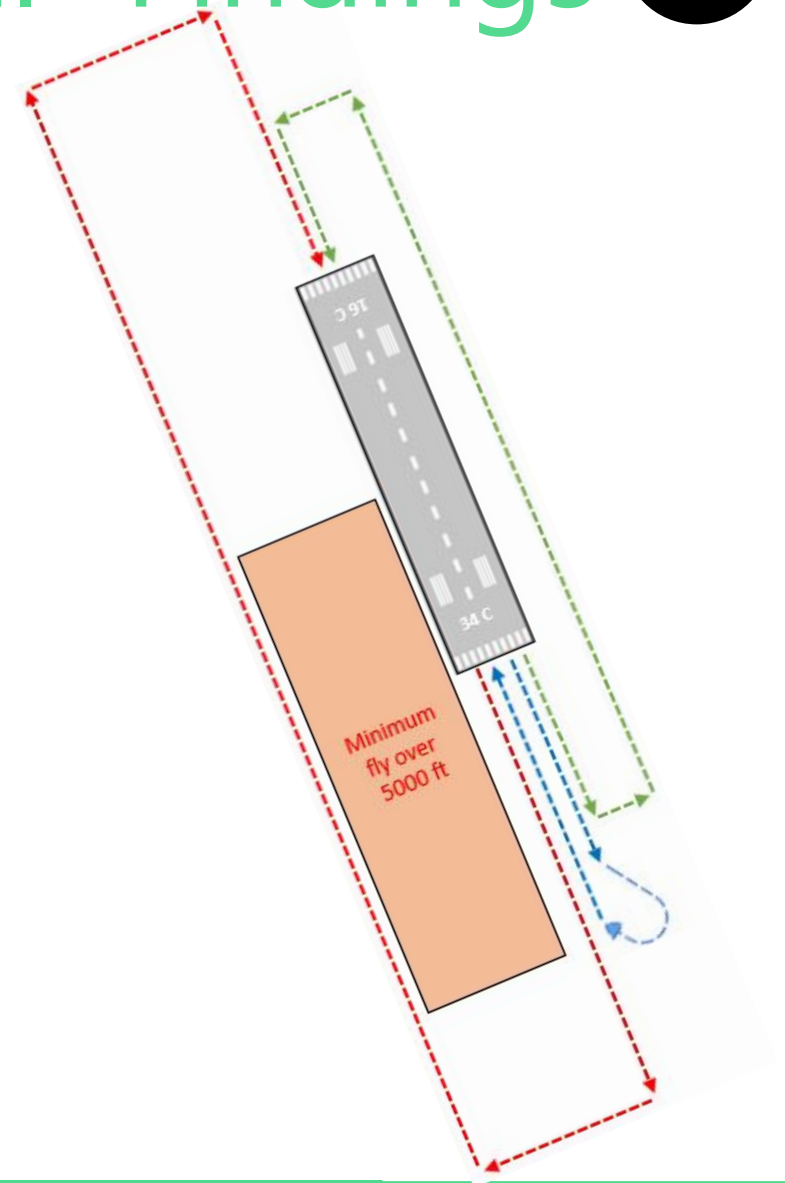
Air Traffic Services “Initial” Findings 1

1. ATC vectored an after-takeoff emergency flight for excessive distances

- Total flight time: 16 minutes
- Total Distance flown: 65 NM

Alternate shorter time and distance with optional vectoring:
(Left Circuit and course reversal for runway 34)

- Time Projected: 5 to 10 minutes
- Distance Projected: 15 to 40 NM




Air Traffic Services “Initial” Findings 2

2. ATC transferred the emergency aircraft to three different frequencies.
3. Changing the assigned runway for landing multiple times resulting in flight crew confusion (CVR)- confirmed).
4. Assigning the Landing runway was based on “pre-planned” ATC guided procedure NOT flexible to account flight crew preference.
5. Fire and Rescue Services were poorly informed about the flight details leading to confused response.
6. Authorized runway occupancy by other aircraft while emergency flight approaching Finals.





ANSP Actions

- 
- Enabling flight crew in emergencies to choose the most suitable runway to land regardless of consequent operational impacts and prioritize it.
 - Utilization of the aerodrome traffic circuit for emergencies to minimize the flying distance if applicable.
 - Holding all other activities on a runway reserved for an emergency landing.
 - Adding a supervisor quick reference checklist for the required information to pass while notifying the FRS in cases of emergency.

Quick Results

Twenty-one days from the date of the occurrence, the AIB reviewed recorded occurrences verifying implementation of all recommendations derived from the initially shared findings.

- ✓ Tower control keeping the emergency traffic on a single frequency.
- ✓ Directing the emergency traffic to join the traffic circuit.
- ✓ Imposing silence on the frequency while dealing with an emergency.
- ✓ Flight crew advised of availability of all runways to choose from for landing.
- ✓ Canceling all departures and directing arrivals to holding areas as situation dictated to avoid possible conflicts.
- ✓ Following the emergency notification checklist facilitated the information delivery to FRS and overall emergency response.



Thank you

