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SAFETY

NACC Aviation Accident and Incident Investigation (AIG) Turnkey Project Session 2

Fernando Camargo

Regional Officer, Technical Assistance

May 2022





Objective

To assist Caribbean and Central American States in the area of AIG by:

- a) Building/enhancing national capacity in accident and incident investigation;
- b) Enabling the establishment/consolidation of Investigation Cooperative Mechanisms (ICMs);
and
- c) Enabling the future adoption of a RAIO approach



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Agenda

- ✈ Understanding and drafting models of the processes and measures required in AIG
- ✈ Understanding and drafting models of the systems required in AIG
- ✈ Identifying and drafting the organization/structure of the means required in AIG



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AIG Processes and Measures

- ✈ Sufficient financial resources
- ✈ Sufficient personnel
- ✈ Relieve seconded experts from their regular duties
- ✈ Avoid possible conflicts of interest
- ✈ Initial response following the receipt of a notification



AIG Processes and Measures

- ✈ Determine the extent of an accident investigation
- ✈ Investigating serious incidents
- ✈ Determine which types of incidents will be investigated by the investigation authority
- ✈ Ensure that a draft Final Report is not disclosed to the public



Sufficient financial resources

6.105 Has the State established and implemented a process to ensure that the accident investigation authority has sufficient financial resources to investigate accidents and serious incidents?

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Key elements:

1. Established and implemented
2. Process to ensure
3. Sufficient

6.105 Has the State established and implemented a process to ensure that the accident investigation authority has sufficient financial resources to investigate accidents and serious incidents?

1. Established and implemented

Requires evidence of a dedicated budget commensurate with the activity of the aviation within the State (that includes foreign airline activities)

6.105 Has the State established and implemented a process to ensure that the accident investigation authority has sufficient financial resources to investigate accidents and serious incidents?

2. Process to ensure

It is not about having a budget today, but having a process that will ensure that every year the accident investigation authority will have funds to carry out all estimated* investigations

In addition, the process needs to provide the pathways to access supplementary funding whenever necessary (cases of major/complex investigation)

* *Investigations cannot be predicted, but can be estimated using historical information*

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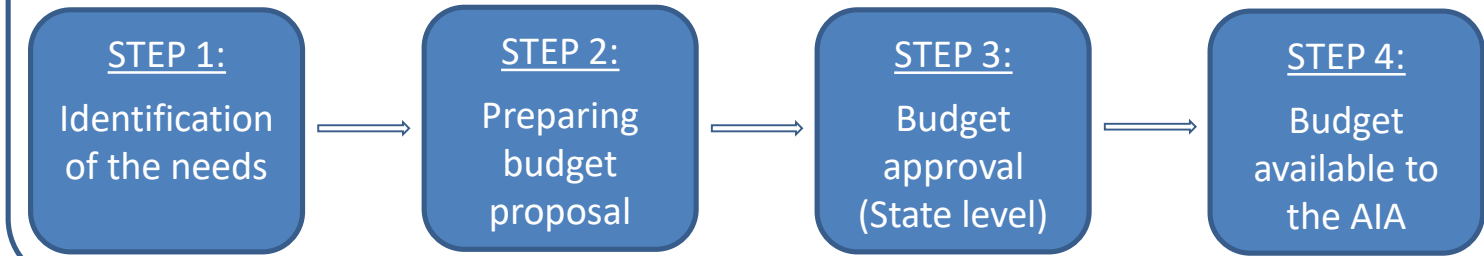
3. Sufficient

To determine how much would be sufficient the process needs to consider the history of investigations within the State, as well as the requirements for the investigations to occur (i.e. sufficient and qualified human resources, equipment, means of transportation, hiring of services, etc.)

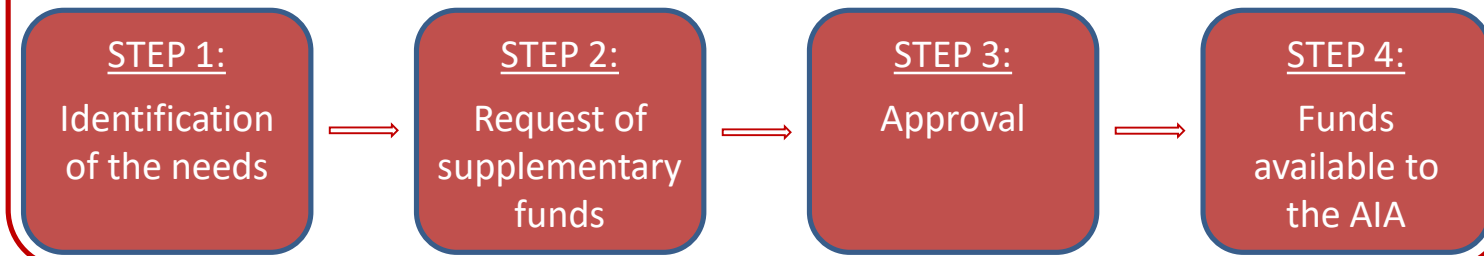
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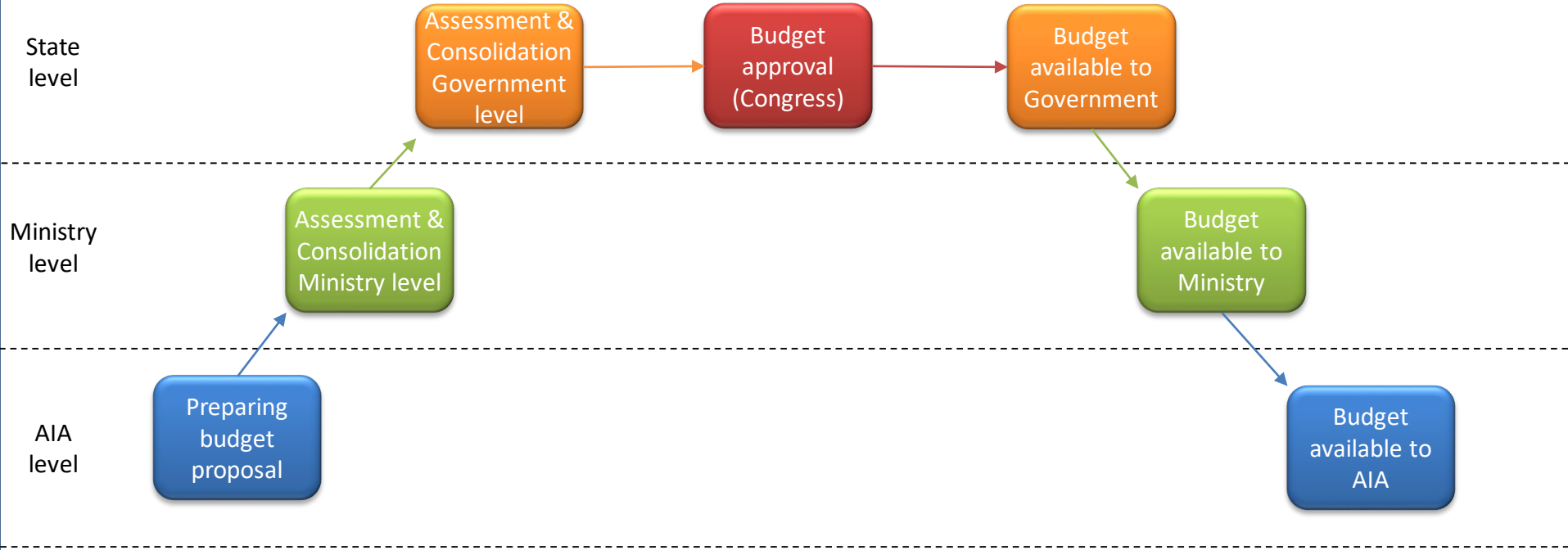
Ordinary (annual) budget



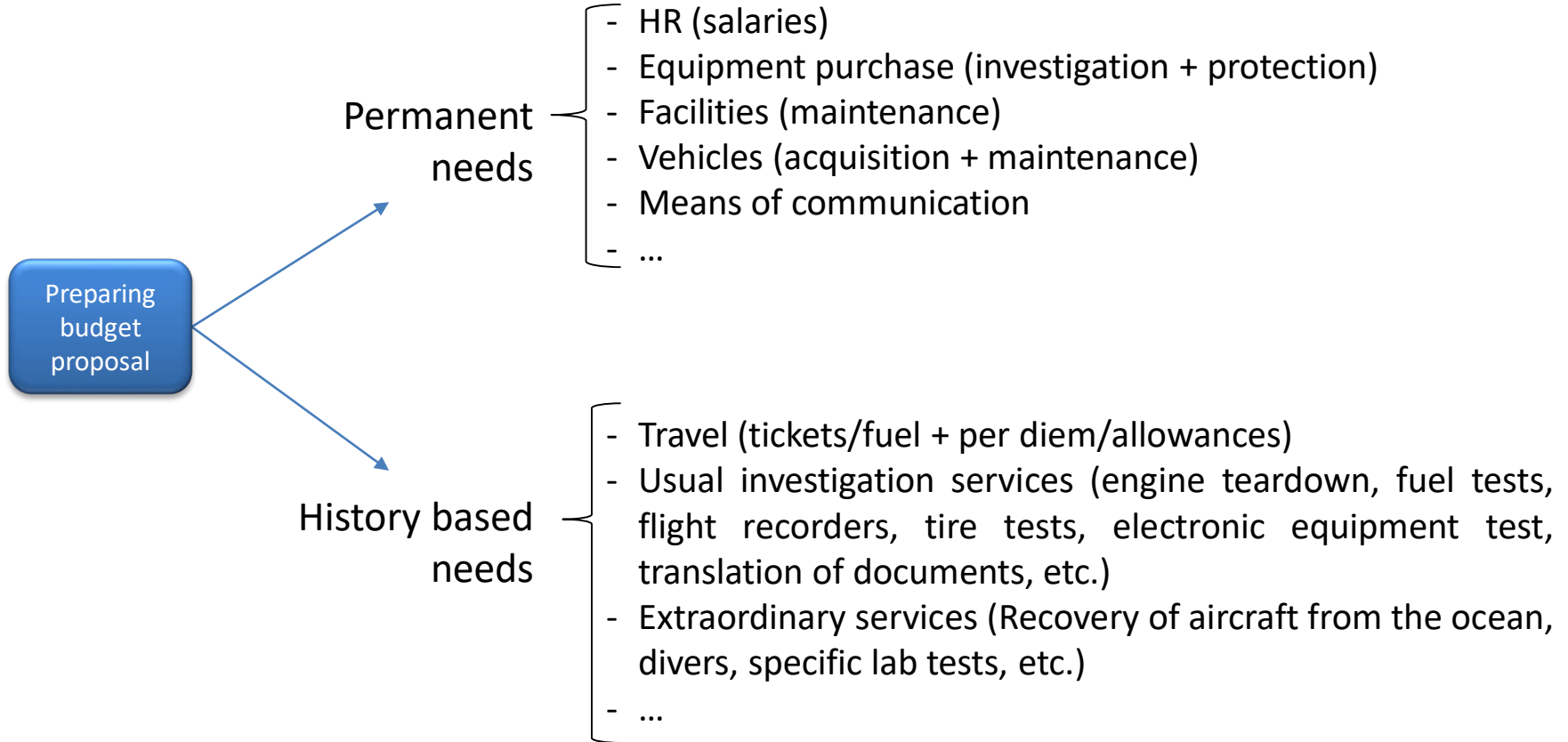
Request for supplementary funds



EXAMPLE OF ORDINARY NATIONAL BUDGET PROCESS



ORDINARY NATIONAL BUDGET PROCESS



ORDINARY NATIONAL BUDGET PROCESS

Preparing
budget
proposal

- Internal procedure (of the AIA or the Ministry/Secretary under which the AIA is placed)
- In accordance with a calendar
- Some States adopt an electronic system to process the budget proposal
- The proposal is submitted upwards

ORDINARY NATIONAL BUDGET PROCESS

Assessment &
Consolidation
Ministry level

- Usually, the AIA budget will be part of the government's body under which it has been positioned
- When adjustments are required at the Ministry level and cuts in the proposal are deemed necessary by Government, the AIA must be called to detailed expose its needs and challenge to avoid the cuts before any decision is made, or at least manage the impacted budget areas
- At any situation, the State is required to ensure that the minimum/necessary budget to support the investigations is granted

ORDINARY NATIONAL BUDGET PROCESS

Assessment &
Consolidation
Government
level

- Cuts at this level are not usual (since everything is usually handled at the Ministerial level)
- Anyway, if there is any contingency affecting the budget proposal, the AIA must be able to timely expose its needs and challenge to avoid the cuts before any decision is made, or at least manage the impacted budget areas
- At any situation, the State is required to ensure that the minimum/necessary budget to support the investigations is granted

ORDINARY NATIONAL BUDGET PROCESS

Budget
approval
(Congress)

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- Anyway, if there is any contingency affecting the budget proposal, the AIA must be able to timely expose its needs and challenge to avoid the cuts before any decision is made, or at least manage the impacted budget areas
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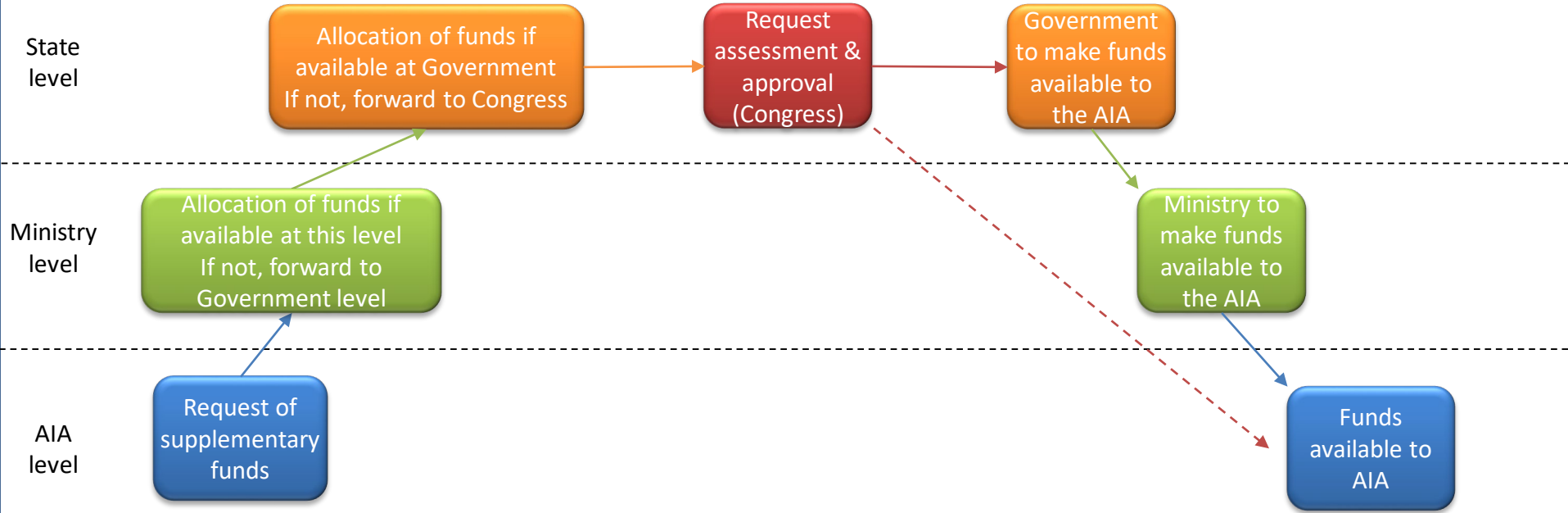
ORDINARY NATIONAL BUDGET PROCESS

Budget
available to
the AIA

- The pathway for the budget to become available to the AIA will depend on the level of bureaucracy of the State
- Usually, the budget follows the same steps make at the proposal part of the process

At any situation, the State is required to ensure the availability of funds to support the investigations along the budget approval process

SUPPLEMENTARY FUNDS REQUEST PROCESS



SUPPLEMENTARY FUNDS REQUEST PROCESS

To request additional funds for a major accident case, a process that already exists in the country for dealing with calamity or emergency situations will normally be used.

In many States, an emergency fund already exists at the disposal of the Minister and/or the President, which can be accessed more quickly

If this is not possible, there is always a way to ask Congress to change the national budget, allocating additional resources for research (this is normally the longest way)

SUPPLEMENTARY FUNDS REQUEST PROCESS

In all cases, it is important that the investigating authority knows what procedures to follow in order to request additional funds from the appropriate authority.

It is necessary to compile all national legislation applicable to each possibility

- Emergency fund at Ministry level
- Emergency fund at President level
- Request of supplementary funds to the Congress

Based on the existing legislation/processes, it may be necessary to develop an internal procedure to begin the request for funding



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Sufficient personnel

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

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Key elements:

1. Mechanism to ensure
2. Sufficient personnel
3. Obligations

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

1. Mechanism to ensure

In any situation where the authority doesn't have sufficient personnel, the State will be considered not compliant with this requirement

The mechanism includes:

- The accurate identification of the number of people necessary
- The appropriate process for hiring the necessary personnel
- The offer of relevant benefits to maintain the staff

The mechanism is linked with other processes like: budget, HR related legislation, organization manual (with job descriptions, qualification and experience for each position) etc.

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

2. Sufficient personnel

The number of staff required will be identify by assessing the historical workload

Staff may be divided into categories, depending on the structure of the organization (e.g. investigators, technical experts, administrative staff, etc.)

The workload to be assessed is related to the execution and support to all the obligations of the authority

This process needs to be carried out periodically, to ensure that the available staff remains adequate to the level of activities of the authority

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

3. Obligations

This will include:

- The investigations to be carried out
- The training necessary to have current and qualified investigators
- Processing of notifications, draft reports, recommendations and other documents/requests received
- Rulemaking/amendment processes
- Formulation and revision of procedures and guidance
- Establishment and maintenance of the occurrences database

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- Establishment and maintenance of the occurrences database
- Vacation and sick leave
- Around a 20% of “free time” to address non planned requests

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

First thing to do is to create the tool to measure the workload (a MS Excel spreadsheet will be enough) addressing separately each category of employee

- List the activities required to be carried out
 - Identify among the investigations carried out in the last 5 years the average duration of the investigations
 - Take from the Training Programme the information regarding the yearly involvement of each person in training
 - Assess the average time allocated to processing notifications, recommendations, draft final reports, contacting operators and the CAA to gather information to support investigations (e.g. information on the a/c, crew, dangerous goods, maintenance, etc.)
- ...

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First thing to do is to create the tool to measure the workload (a MS Excel spreadsheet will be enough) addressing separately each category of employee

- List the activities required to be carried out
 - ...
- Add vacation and sick leave
- Add around a 20% of “free time” to address non planned requests (you may name it as “other tasks not listed”)

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

IMPORTANT: After identifying all the main activities of the organization, you will need to ensure that they are well distributed among the different positions/categories available in the organization, and that distribution needs to be reflected in the appropriate document (something like an Organization Manual, Administrative Manual, HR Manual, etc.) that contains the description of all the positions that form the authority, with the functions and responsibilities, as well as the requirements of qualification and experience related to each position

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

The tool (spreadsheet) will show as a result the number of persons necessary for each category (if fractioned, that number must be rounded up)

That final number will be confronted with the existing personnel and the gap shall be object of a hiring process

The requirement is not finished at this point!!!

Remember that **the mechanism needs to ensure** that you have sufficient personnel.

That means: hiring and maintaining


If the hiring of necessary staff is not effective, the mechanism is not ensuring sufficient staff

If the organization has high staff turnover, the mechanism is not being efficient either

6.113 Has the State implemented a mechanism to ensure that the accident investigation authority has sufficient personnel to meet its national and international obligations related to aircraft accident investigations?

Remember that **the mechanism needs to ensure** that you have sufficient personnel
That means: hiring and maintaining

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 **Civil Aviation Authority of Coronaland**
Accident Investigation Section
HR Workload Spreadsheet

APLICABILITY	HOURS TAKEN BY INDIVIDUAL PROCESSES	TOTAL HOURS PER STAFF
Technical staff	132	1166
Administrative staff	72	1106
All staff	1034	

PROCESS	SUB PROCESS	TASK	AVERAGE HOURS PER TASK	AVERAGE NUMBER OF EXECUTIONS PER YEAR	TOTAL HOURS OF ACTIVITY PER YEAR	TOTAL HOURS BY PROCESS PER YEAR
ADMINISTRATIVE	Administrative activities	Administrative mandatory training	4	4	16	540,00
		Administrative meetings	2	12	24	
		All staff meeting	3	12	36	
		Financial processes <i>(travel claims, medical claims, etc.)</i>	4	18	72	
		HR processes	3	24	72	
		Annual leave	240	1	240	
		Sick leave	8	10	80	
TRAINING	Technical training activities <i>(Based on the training programme and trainings, as well as on the profile of existing HR)</i>	Recurrent training	32	0,5	16	116,00
		Specialized/Advanced training	40	0,5	20	
		OJT's <i>(include the training activity properly, which is already considered among the investigation activities)</i>	80	0,5	40	
		Provision of training <i>(for instructors, including OJT)</i>	80	0,5	40	
	Administrative training	Administrative processes and systems training	24	2	48	72,00
		Recurrent training	24	1	24	
	Feedback on training received <i>(Sharing of knowledge)</i>	Feedback on training provided internally	1	18	18	30,00
		Feedback on training provided by other sources	1	12	12	
Other trainings	Other trainings	16	1	16	16,00	
CONTINGENCIES AND UNPLANNED ACTIVITIES	CONTINGENCIES	Contingencies	32	1	32	464,00
	UNPLANNED ACTIVITIES	Unplanned activities	24	18	432	
					TOTAL WORKLOAD	1238,00

J3

A B C D E F G H

LEGAL WORKING HOURS PER YEAR	INSTITUTIONAL WORKING HOURS PER YEAR		APLICABILITY	TOTAL HOURS PER STAFF LEVEL	INSTITUTIONAL WORKLOAD PER STAFF LEVEL	STAFF REQUIRED FOR INSTITUTION
	Technical staff	Administrative staff	Technical staff	4619	6,638/263306	6
2000	834	834	Administrative staff	1288	1,440/75884	2
			Both Tech and Admin required	1396		
			Any staff	646		

	PROCESS	TASK	AVERAGE HOURS PER TASK	AVERAGE NUMBER OF EXECUTIONS PER YEAR	TOTAL HOURS PER YEAR			
1	LEGISLATION AND TECHNICAL GUIDANCE	Creation/revision of primary aviation legislation and AIG regulation	Periodic revision of primary aviation legislation	40	1	40	122,00	
2			On demand revision of primary aviation legislation	40	0,25	10		
3			Periodic revision of AIG regulation	40	1	40		
4			On demand revision of AIG regulation	24	0,5	12		
5			Making new AIG regulation	16	0,5	8		
6			Coordination meetings with CAA <i>to coordinate with the activities mentioned in the previous paragraph</i>	4	3	12		
7		Creation/revision of technical guidance	Creation/revision of technical guidance	Periodic revision of technical guidance	24	1	24	96,00
8				On demand revision of technical guidance	48	1	48	
9				Making new technical guidance	48	0,5	24	
10		Creation/revision of procedures	Creation/revision of procedures	Periodic revision of procedures	96	1	96	193,00
11				on demand revision of procedures	16	2	32	
12				Making new procedures	16	3	48	
13		ADMINISTRATIVE	Administrative activities	Quality system management	10	52	520	624,00
14	Financial processes <i>budget budget</i>			4	18	72		
15	Annual budget proposal			32	1	32		
16	TRAINING	Technical training support <i>(based on the existing programme and activities plan, as well as on the specific activities)</i>	Periodic revision of Training Programme	24	1	24	228,00	
17			On demand revision of Training Programme	32	0,5	16		
18			Preparation/maintenance of Training Plan	40	2	80		
19			Registering training received	3	12	36		
20			Preparing training courses	24	2	48		
21			Deploying training courses	24	1	24		
22		Administrative training	Administrative training	Preparing training courses	24	3	72	174,00
23				Deploying training courses	24	3	72	
24			Registering training received	10	3	30		
25	Processing of notifications received within Coronaland	Processing of notifications received within Coronaland	Validating/complementing information	2	30	60	104,00	
26			Institution of investigation/designation of investigator-in-charge	1	8	8		
27			Notification to other States and ICAD	1	8	8		

Workload Tool Exercise



Relieve seconded experts from their regular duties

6.133 If the State has arrangements to use experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to relieve these experts from their regular duties during the investigation?

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NOTE

The ICAO reference regarding Doc 9756 Part I is not accurate.

ICAO References
GM Doc 9756 Part I 2.4.1

It should be 2.5.1 instead

6.133 If the State has arrangements to use experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to relieve these experts from their regular duties during the investigation?

Key elements:

1. If
2. Use experts as investigators
3. Measures
4. Relieve from regular duties

6.133 If the State has arrangements to use experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to relieve these experts from their regular duties during the investigation?

If:

This conditional implies that the PQ might be not applicable for the States that have their own personnel (and doesn't need secondment)

6.133 If the State has arrangements to use experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to relieve these experts from their regular duties during the investigation?

Use experts as investigators:

In theory, the requirement doesn't reach the cases where an expert is participating in the investigation just as an expert (not an investigator)

This does not preclude the possibility of having an agreement to also relieve an expert while dedicated to supporting an investigation

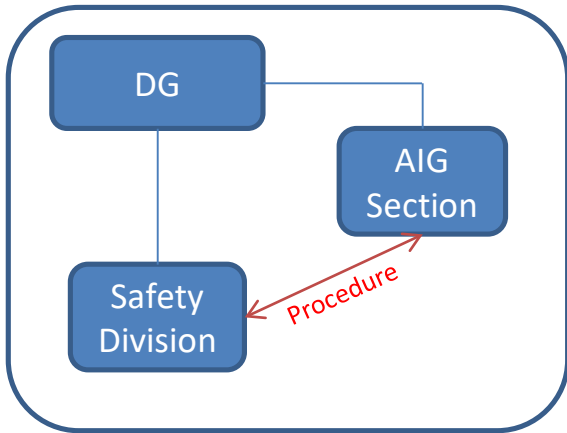
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Measures:

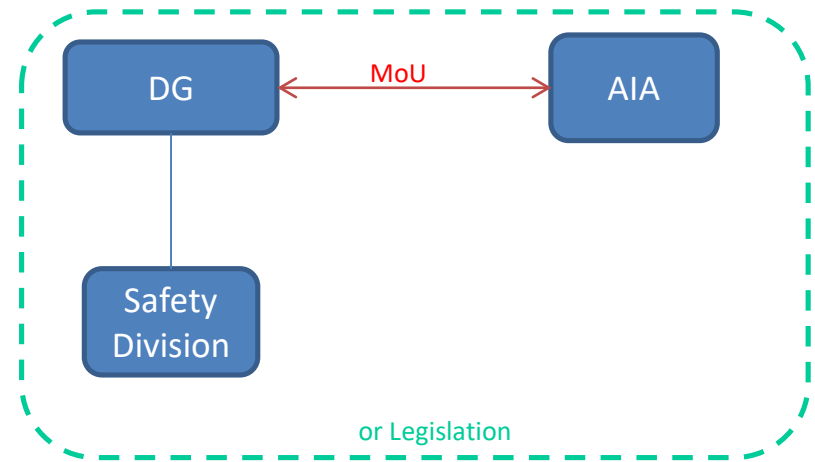
Any effective means adopted by the State (e.g. procedure, MoU, legislation, etc.)

6.133 If the State has arrangements to use experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to relieve these experts from their regular duties during the investigation?

AIG under CAA:



Independent AIA:



6.133 If the State has arrangements to use experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to relieve these experts from their regular duties during the investigation?

Regardless of the structure of the AIA, it is essential:

- A provision that binds both the CAA and the AIG entity, ensuring the release of the expert to be seconded (i.e. legislation, MOU, or procedure)
- A formal request for secondment, mentioning the period for which the expert must dedicate him/herself fully to the investigation (and therefore be released from his/her regular duties)
- A formal approval and secondment with the release from regular duties



Civil Aviation Authority of Coronaland

Accident Investigation Section (AIG)

Request N. 04/AIG/2022 - Request for Secondment of Inspector

To:	Chief of the Safety Division
Cc:	Secretary of the Director-General
Subject:	Request for Secondment of Inspector
Reference:	Section 12, b, of the Memorandum 032/2016/DG, Technical support to the safety investigations carried out by the AIG Section
Attachments	A- Term of Secondment B- Term of Confidentiality C- Declaration of Absence of Conflict of Interest

Dear Chief,

I refer to the abovementioned MEMO 032/2016/DG to request the support of the Safety Division for the investigation instituted by this Section in compliance with ICAO Annex 13, as follows:

- Occurrence type: **Accident**
- Date of occurrence: **17/05/2022**
- Aircraft(s) involved: **CN-9734-JT**
- Expert requested: **RICHARD THOMPSON**
- Secondment Period: From: **23/05/2022** to: **27/05/2022**

I kindly remind you that this secondment needs to be approved through the Term of Secondment attached, as per MEMO 032.

In addition, I would like to request that the secondee report for duty at this Section with both the Term of Confidentiality (Attachment B) and the Declaration of Absence of Conflict of Interest (Attachment C) duly completed and signed.

Finally, I anticipate that the expert will probably be required to participate in further phases of the investigation, to which new requests will be forwarded.

Best regards,

Cap. John Doe
Chief Investigator, AIG Section



Civil Aviation Authority of Coronaland

TERM OF SECONDMENT N. 04/DG/2022

To: Chief of the AIG Section

C/c: Chief of the Safety Division

I designate the officer below to assist in the investigation of the occurrence described in Request No. 04/AIG/2022, dated May 20, 2022, from the Chief of the AIG Section.

Officer: **RICHARD THOMPSON**

As a result, the official is fully relieved of all his/her regular duties for the requested period, during which the official will respond technically and administratively to the Chief of the AIG Section.

By this Term, the Chief of the Safety Division is notified.

Coronaland City, **20 May 2022**

Capt. Wenderson P. Wells

Director-General of Civil Aviation of Coronaland

Expert Secondment Exercise



Avoid possible conflicts of interest

6.135 If the State uses experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to avoid possible conflicts of interest?

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Key elements:

1. Avoid
2. Possible conflicts of interest

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Avoid:

Defenses must be put in place to avoid conflicts of interest

Although the requirement mentions "avoid," conflicts of interest that arise during the investigation must also be mitigated

6.135 If the State uses experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to avoid possible conflicts of interest?

Possible conflicts of interest:

- The greatest potential for conflict of interest in the investigation is related to the surveillance processes conducted by the CAA
- Therefore, it is necessary to make a prior assessment of such processes in relation to the aircraft, the crew and the operator
- Other types of conflict that may involve direct or indirect relationships: of kinship, close social, commercials, professionals, etc.

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Defences:

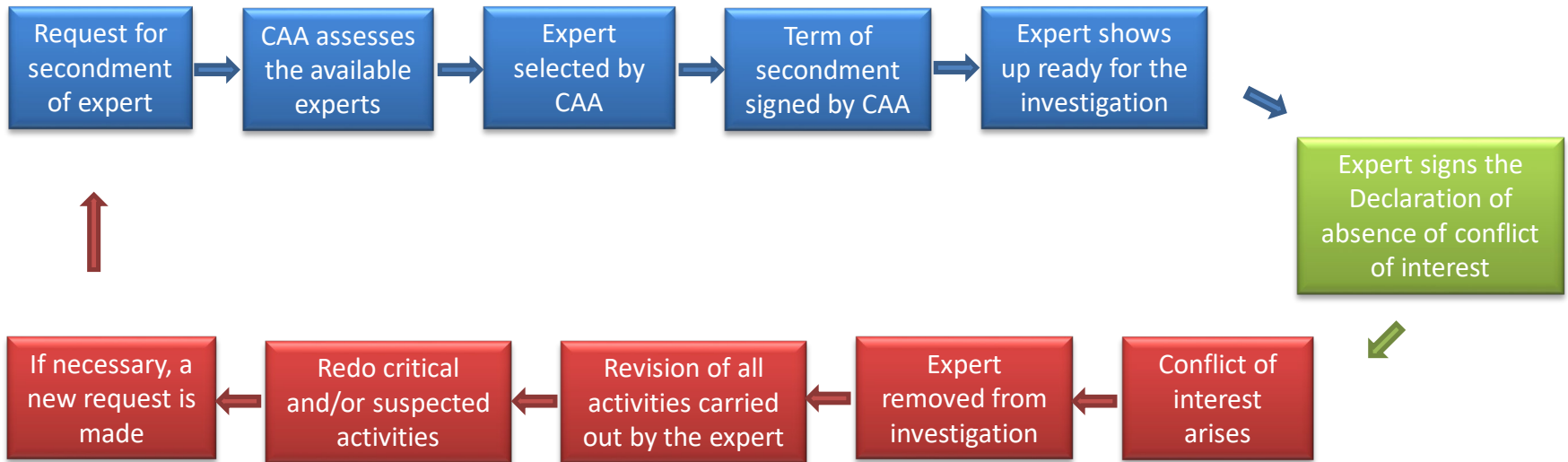
- Assessment on behalf of the CAA on any previous participation of the expert to be seconded in any surveillance process related to any element (crew, aircraft, ATS, maintenance, etc.) involved in the occurrence
- Term of absence of conflict of interest to be signed by the expert

6.135 If the State uses experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to avoid possible conflicts of interest?

Mitigation:

- Immediate removal of the expert from any activity related to the investigation, collecting all material in his/her possession, as well as any credential or accreditation provided
- Review of any action taken by the expert in the investigation
- Redo, if possible, any and all examinations, tests and analyses made by the expert, in order to guarantee the integrity of the investigation.

6.135 If the State uses experts seconded by the State's CAA or other organizations in the State as investigators, has it established and implemented measures to avoid possible conflicts of interest?





Civil Aviation Authority of Coronaland

Accident Investigation Section (AIG)

DECLARATION OF ABSENCE OF CONFLICT OF INTEREST

Occurrence type:	Accident	Occurrence date:	17/05/2022
Aircraft(s) involved:	CN-9734-JT	Term of Secondment:	04/DG/2022

I, the undersigned **RICHARD THOMPSON**, being seconded to support the AIG Section in the investigation of the above-mentioned occurrence, hereby solemnly declare that I am not and shall not be in any situation which could give rise to a conflict of interest in what concerns the activities to be carried out by myself and the functions under my responsibility while supporting such investigation.

I undertake to act with complete impartiality and in good faith with respect to this investigation and to promptly report to the AIG Section and the Director-General, in writing, any situation that may raise concerns regarding a conflict of interest, impartiality or my ability to properly execute the investigation-related activities assigned to me.

Coronaland City, **20 May 2022**

RICHARD THOMPSON

Conflict of Interest Exercise



Initial response following the receipt of a notification

6.316 Has the State established procedures and guidance, including a checklist, for the initial response following the receipt of a notification?

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Within the State

(i.e. being State of Occurrence)

Decide on the institution of an investigation

- If yes:
 - Designate the investigator-in-charge (IIC)
 - Request info from operator, service provider, CAA, maintenance organization, etc.
 - Apply process to investigate the type of occurrence (PQ 6.343)
 - Register the occurrence in the database
- If not:
 - Register the occurrence in the database

Prepare notification to other States and ICAO if applicable

From other State

(State of Registry, Operator, Design, or Manufacture)

To the State that sends the notification:

- Acknowledge receipt

To the State of the Occurrence:

- Provide relevant information regarding the aircraft and flight crew
- Inform whether it intends to appoint an accredited representative
- Provide details of dangerous goods on board the aircraft (if State of the Operator)

6.316 Has the State established procedures and guidance, including a checklist, for the initial response following the receipt of a notification?

- Procedures will be seen in Session 3 of the Project
- Guidance shall be developed based on the procedures



Determine the extent of an accident investigation

6.343 Has the State established and implemented policies, procedures and guidelines to help determine the extent of an accident investigation (including the scope of the investigation and whether or not investigators will be deployed on site), depending on the circumstances of the accident and the safety lessons that it expects to draw from the investigation?

6.343 Has the State established and implemented **policies**, procedures and guidelines to help determine the **extent** of an accident investigation (including the scope of the investigation and whether or not investigators will be deployed on site), depending on the **circumstances** of the accident and the **safety lessons** that it expects to draw from the investigation?

Key elements:

1. Policies
2. Extent
3. Circumstances
4. Safety lessons

6.343 Has the State established and implemented **policies**, procedures and guidelines to help determine the **extent** of an accident investigation (including the scope of the investigation and whether or not investigators will be deployed on site), depending on the **circumstances** of the accident and the **safety lessons** that it expects to draw from the investigation?

Policies:

A policy is a declaration of intent

6.343 Has the State established and implemented **policies**, procedures and guidelines to help determine the **extent** of an accident investigation (including the scope of the investigation and whether or not investigators will be deployed on site), depending on the **circumstances** of the accident and the **safety lessons** that it expects to draw from the investigation?

Extent:

The extent of an investigation means how wide, how far and how deep you will go with the investigation, and that will depend on the circumstances of the occurrence

In some situations, the determination of the extent can be predetermined (e.g. accidents caused by illegal interference, accidents with non-certified aircrafts, accidents caused by non-qualified person, etc.

Other situations will require assessment during the investigation
Guidance has to be provided for both cases.

6.343 Has the State established and implemented **policies**, procedures and guidelines to help determine the **extent** of an accident investigation (including the scope of the investigation and whether or not investigators will be deployed on site), depending on the **circumstances** of the accident and the **safety lessons** that it expects to draw from the investigation?

Circumstances:

Accidents may be grouped according to certain criteria, as: type of operation, category of aircraft, injury level, damage, social repercussion, involvement of other States, presence of illegal activity, etc.

Circumstances will help determine these criteria

Different approaches will address each of the criteria

Example of accident investigation





Accident investigation process

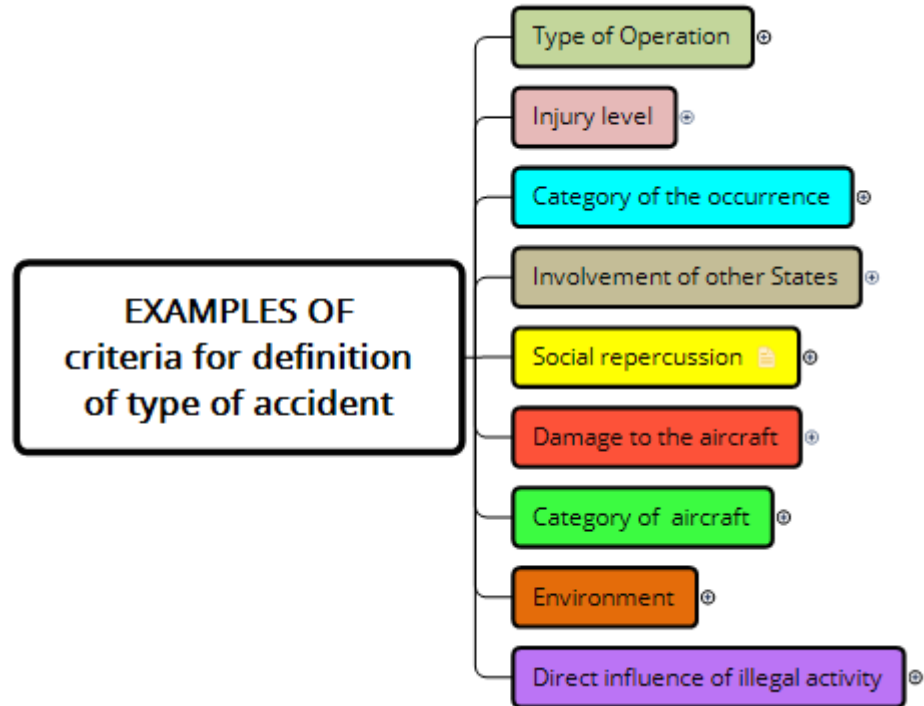
- ✈ Activities may be more or less complex depending on the characteristics of the accident (or incident)
- ✈ The investigation process must be planned in a way to assist the IIC in carrying out the activities at the level of complexity required by the investigation

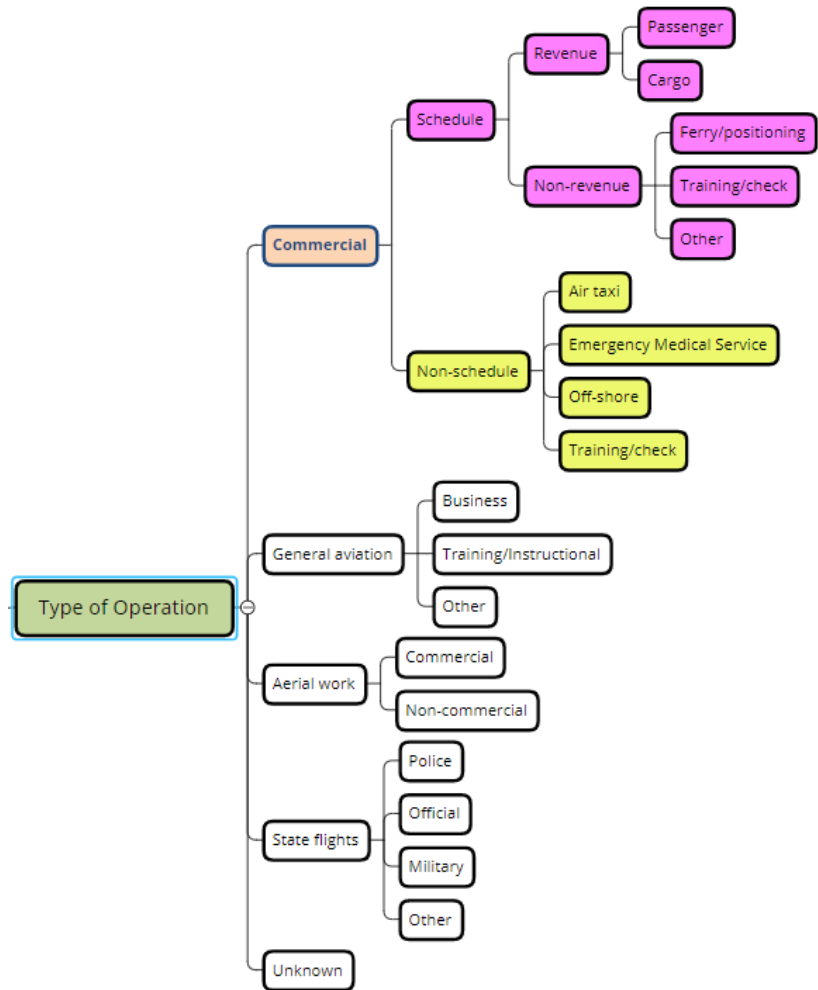


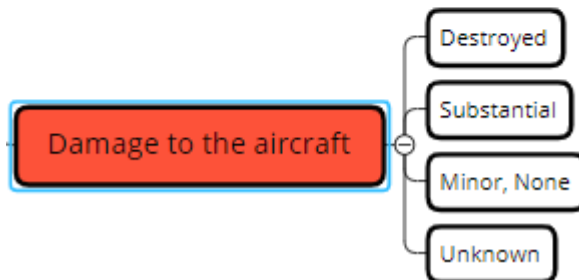
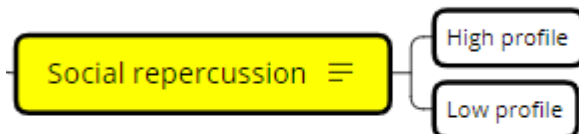
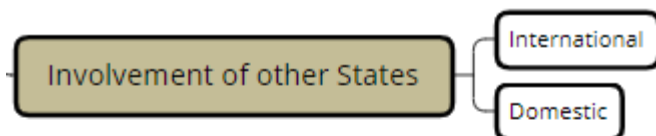
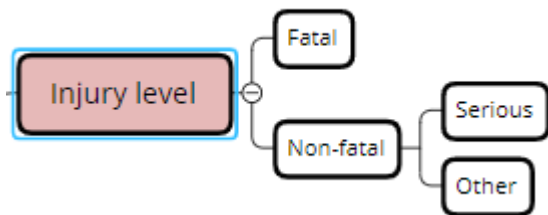
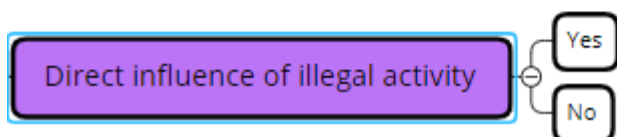
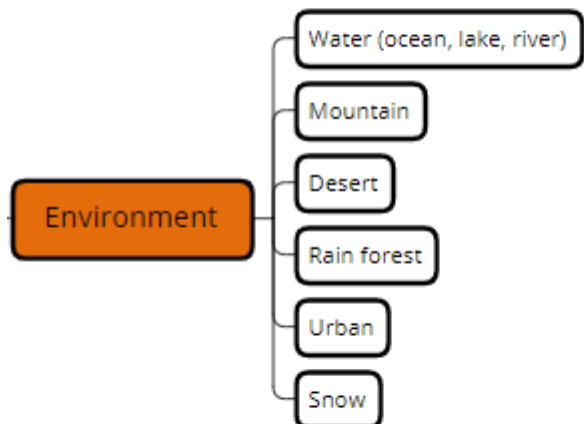
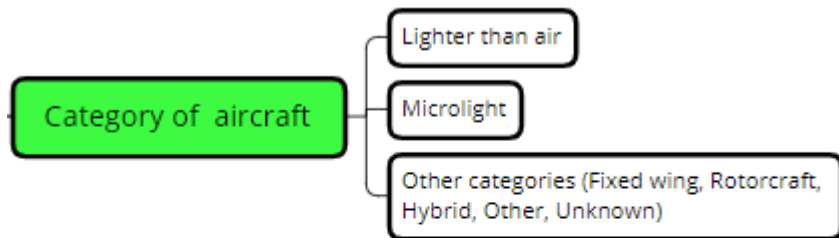
Accident investigation process

- ✈ The process should offer different routines for each activity whose degree of complexity varies according to the circumstances of the accident, like:
 - ✈ The appointment of a IIC only, or a large team
 - ✈ Going or not to the crash site
 - ✈ Interaction with other entities
 - ✈ Etc.

Selecting relevant criteria







Category of the occurrence

ADRM: Aerodrome

AMAN: Abrupt manoeuvre

ARC: Abnormal runway contact

ATM: ATM/CNS

BIRD: Birdstrike

CABIN: Cabin safety events

CFIT: Controlled flight into or toward terrain

CTOL: Collision with obstacle(s) during take-off and landing

EVAC: Evacuation

EXTL: External load related occurrences

F-NI: Fire/smoke (non-impact)

F-POST: Fire/smoke (post-impact)

FUEL: Fuel related

GCOL: Ground Collision

GTOW: Glider towing related events

ICE: Icing

LALT: Low altitude operations

LOC-G: Loss of control - ground

LOC-I: Loss of control - inflight

LOLI: Loss of lifting conditions en-route

MAC: Airprox/ ACAS alert/ loss of separation/ (near) midair collisions

RAMP: Ground Handling

RE: Runway excursion

RI: Runway incursion - vehicle, aircraft or person

RI-O: Runway incursion - other

RI-VA: Rwy incursion-vehicle or a/c

SCF-NP: System/component failure or malfunction [non-powerplant]

SCF-PP: powerplant failure or malfunction

SEC: Security related

TURB: Turbulence encounter

UIMC: Unintended flight in IMC

USOS: Undershoot/overshoot

WILD: Collision Wildlife

WSTRW: Windshear or thunderstorm

OTHR: Other

UNK: Unknown or undetermined



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Fictitious Scenario - Coronaland

✈ Relevant aspects/circumstances for Coronaland:

✈ *Type of operation*

✈ *Injury level*

✈ *Involvement of other States*

✈ *Social repercussion*



Fictitious Scenario - Coronaland

✈ Relevant aspects/circumstances

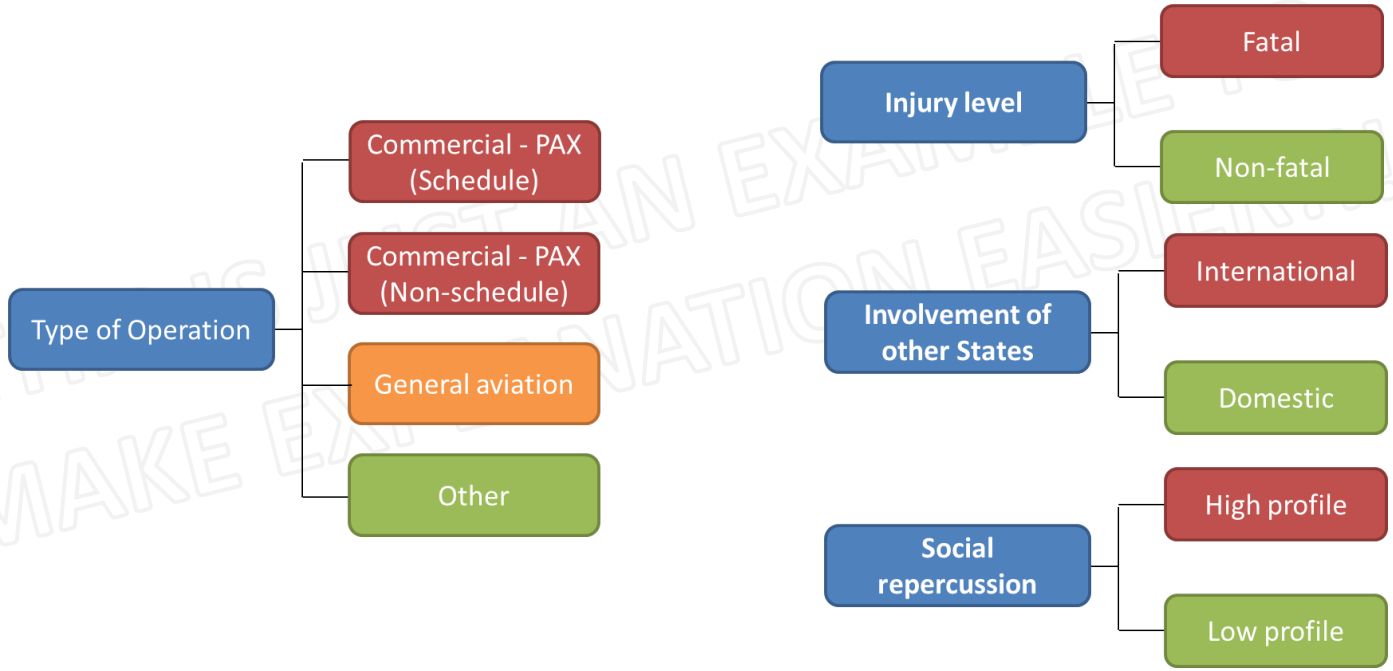
✈ Type of operation

✈

**THIS IS JUST AN EXAMPLE TO
MAKE EXPLANATION EASIER!!!**



Relevant aspects/circumstances for Coronaland





Forming classes of accidents

Types of Accident		Social repercussion	Injury level	Type of Operation	Involvement of other States
	Class 1	High profile	Fatal	Commercial – PAX (Schedule)	International
	Class 2	High profile	Fatal	Commercial – PAX (Non-schedule) General aviation	International
	Class 3	Low profile	Fatal Non-fatal	General aviation Other Commercial – PAX (Non-schedule)	Domestic
	Class 4	Low profile	Non-fatal	General aviation Other	Domestic



Framework for the investigation process

- ✈ Create a plan of investigation covering:
 - ✈ The main aspects of the investigation
 - ✈ The different approaches for each “Class” (group, type) of accident
 - ✈ Develop procedures and guidance to cover all the activities mentioned in your plan



Aspects to be planned*

✈ Response to a received notification:

✈ IIC only X Investigation Team

✈ Sending investigators to actions on site

✈ Parallel support activities from the State's AIG office

✈ Special needs due to environment

***The list of aspects mentioned in this presentation is not exhaustive**



Aspects to be planned

✈ Interaction with other stakeholders

- ✈ Other investigations (e.g. Police, Justice, CAA)

- ✈ Victims and families

- ✈ Press

***The list of aspects mentioned in this presentation is not exhaustive**



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Aspects to be planned

- ✈ Examination of parts and components
 - ✈ Arrangements with laboratories, workshops, etc.
 - ✈ When not to readout flight recorders

***The list of aspects mentioned in this presentation is not exhaustive**



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Aspects to be planned

✈ Reporting

- ✈ Types of report

- ✈ Formats of report

***The list of aspects mentioned in this presentation is not exhaustive**

Process of Investigation of Accidents Exercise

Process of Investigation of Accidents

Exercise

- Establishment of categories
- Activities
- Investigation team
- Report

	Notifying other States and ICAO	Designate an IIC or a Team	Deploy to the site or not	Flight recorders	Autopsies	Take parts for tests	Public hearings	Meeting with families and victims	Certificat. from CAA	Coord. with other authorities	Draft final report	Final report	ADREP accident report
Class 1	X	T	Y	Y	Y	Possible	Y	Y	Y	Y	Y	Y	Y
Class 2	X	T	Y	Y	Y	Possible	Y	Possible	Y	Y	Y	Y	Y
Class 3		I	Y	Possible	Possible	Possible	N	N	Possible	Possible	N	Y	Y
Class 4		I	Only when necessary	N	N	N	N	N	N	N	N	Y	Y

Types of Accident		Social repercussion	Injury level	Type of Operation	Involvement of other States
	Class 1	High profile	Fatal	Commercial – PAX (Schedule)	International
	Class 2	High profile	Fatal	Commercial – PAX (Non-schedule) General aviation	International
	Class 3	Low profile	Fatal Non-fatal	General aviation Other Commercial – PAX (Non-schedule)	Domestic
	Class 4	Low profile	Non-fatal	General aviation Other	Domestic



Investigating serious incidents

- 6.345 Has the State established and implemented:
- a) a process for investigating serious incidents, as well as
 - b) a process, based on risk analysis, to help determine which types of incidents will be investigated by the investigation authority, in conformance with Annex 13?

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- a) a process for investigating serious incidents, as well as
 - b) a process, based on risk analysis, to help determine which types of incidents will be investigated by the investigation authority, in conformance with Annex 13?

For “a)”:

- We will be basically applying the same approach (grouping into criteria) to serious incidents and do the same work done with PQ 6.343
- Depending on the complexity of the aviation system of the State, serious incidents may be considered one only category

6.345 Has the State established and implemented:
a) a process for investigating serious incidents, as well as
b) a process, based on risk analysis, to help determine which types of incidents will be investigated by the investigation authority, in conformance with Annex 13?

For “b)”:

- Risk analysis: for certain types of incident, the AIA should establish the use of a safety analysis tool to assess the risk associated with the incident and make a determination on the institution of an investigation or not
- Several models of risk analysis available

		Risk severity				
		Catastrophic A	Hazardous B	Major C	Minor D	Negligible E
Risk probability	Frequent 5	5A	5B	5C	5D	5E
	Occasional 4	4A	4B	4C	4D	4E
	Remote 3	3A	3B	3C	3D	3E
	Improbable 2	2A	2B	2C	2D	2E
	Extremely improbable 1	1A	1B	1C	1D	1E



Ensure that a draft Final Report is not disclosed to the public

6.417 Has the State, when issuing or receiving a draft Final Report, established and implemented measures to ensure that it is not disclosed to the public?

6.417 Has the State, when issuing or receiving a draft Final Report, established and implemented measures to ensure that it is not disclosed to the public?

Issued by the State

Measures include (*since the preparation of the draft*):

- Initial and recurrent briefings with the team regarding the importance of adopting safety measures to protect information
- Adopt a strict control of access to the investigation registries:
 - Use of safes and locked rooms to keep investigation information
 - Use of a reserved room to meet with the team
 - Term of Confidentiality to be signed by all team members
- The adoption of strict rules regarding cybersecurity, like:
 - The use of segregated intranet to work in the investigation
 - The use of secure FTP to send/receive files
 - Updated professional antivirus
 - Avoid the exchange of pen drives
- Destroy preliminary versions of the draft

6.417 Has the State, when issuing or receiving a draft Final Report, established and implemented measures to ensure that it is not disclosed to the public?

Received from other State

In this case, the AIA will probably have to share the draft (or parts of it) with the operator and/or manufacturer, thus the measures shall include:

- Control the access to the draft
- Terms of Confidentiality to be signed by any person that will have access to the draft
- Whenever possible, meet with the operator and/or manufacturer representatives in a controlled room to discuss the draft
- Make use of secure FTP to send the draft and to receive the comments from operator and/or manufacturer



Civil Aviation Authority of Coronaland

Accident Investigation Section (AIG)

TERM OF CONFIDENTIALITY

Occurrence type:	Accident	Occurrence date:	17/05/2022
Aircraft(s) involved:	CN-9734-JT	Term of Secondment:	04/DG/2022

I, the undersigned **RICHARD THOMPSON**, having been seconded to assist Section AIG in the investigation of the aforementioned occurrence, solemnly declare that I will not release to the public any of the records listed in Article 6 of the Coronaland Accident Investigation Authority Act, as well as any other sensitive information related to the investigation, unless such record or information has already been made publicly available by the competent authority, or when explicitly authorized by the Investigator-in-charge (IIC) or the Chief of the AIG Section.

In addition, I undertake to act with complete discretion and to take all reasonable security measures to protect the records and information related to this investigation from any unauthorized access or use, including by taking cybersecurity measures and any other measures determined by the IIC.

Coronaland City, 20 May 2022

RICHARD THOMPSON

Confidentiality Exercise



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Agenda

- ✈ Understanding and drafting models of the processes and measures required in AIG
- ✈ Understanding and drafting models of the systems required in AIG**
- ✈ Identifying and drafting the organization/structure of the means required in AIG



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SAFETY

AIG Systems

- ✈️ Coordination and standardization with Regional Offices
- ✈️ Receiving and processing notifications without delay
- ✈️ Contact details for the notification to the investigation authority



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SAFETY

AIG Systems

- ✈ Assistance to aircraft accident victims and their families
- ✈ Mandatory incident reporting
- ✈ Accident and incident database



Coordination and standardization with regional offices

6.103 If the investigation authority has regional offices, is there an effective system in place for coordination and standardization?



ICAO

SAFETY

Coordination and standardization regional offices

Not applicable to the majority of the States in our Region

6.103 If the authority has regional offices, is there an effective mechanism for coordination and standardization?

6.103 If the investigation authority has regional offices, is there an effective system in place for coordination and standardization?

Elements that usually require coordination include:

- Progress of the investigations
- Training
- Standardization of procedures
- Procurement for the equipment (when centralized in HQs)
- Meetings



Receiving and processing notifications without delay

- 6.315 Has the State established and implemented a system to ensure that:
- 1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are received and processed without delay during office hours as well as out-of-office hours; ...

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1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are received and processed without delay during office hours as well as out-of-office hours; ...

This PQ is linked with 6.316

6.316 Has the State established procedures and guidance, including a checklist, for the initial response following the receipt of a notification?

6.315 Has the State established and implemented a system to ensure that:
1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are **received** and **processed without delay** during **office hours** as well as **out-of-office hours**; ...

Key elements:

1. Received
2. Processed
3. Without delay
4. Office hours & out-of-office hours

- 6.315 Has the State established and implemented a system to ensure that:
- 1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are **received** and **processed without delay** during **office hours** as well as **out-of-office hours**; ...

Received:

The system shall include the means to receive the notifications

- E-mail:
 - The most usual today
 - Practical if you have a template
 - May be redirected to the mobile
- Website:
 - You may have the form available to be filled
 - Everything on the place (guidance and form)
- Telephone:
 - Reach you immediately
 - Mobiles can access e-mails
 - May require the support of a form to gather the info
- Fax:
 - The last option
 - Will require an office with staff to handle it

6.315 Has the State established and implemented a system to ensure that:
1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are received and processed without delay during office hours as well as out-of-office hours; ...

Processed:

Take the appropriate action regarding the information:

- Decide on the institution of an investigation (see PQ 6.316)
- Acknowledge receipt or notify other States and ICAO
- Register the occurrence in the database

6.315 Has the State established and implemented a system to ensure that:
1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are received and processed without delay during office hours as well as out-of-office hours; ...

Without delay:

- Without delay means immediately
- The main purpose of the notification is to allow the State to take action:
 - Institute an investigation (time is key to preserve evidence)
 - Provide support to the investigation conducted by another State (by providing information on aircraft, crew, dangerous goods, etc.)

Note: The auditor will look for evidences on the hour of the occurrence and the time of the notification to other States/ICAO

6.315 Has the State established and implemented a system to ensure that:
1) notifications of accidents and incidents (forwarded within the State or forwarded by other States) are received and processed without delay during office hours as well as out-of-office hours; ...

Office hours and out-of-office hours:

- States need to have someone on duty 24/7 to receive notifications and take actions in response
- It doesn't need to be an investigator on duty, but someone able to take the appropriate actions (i.e. call the investigator on duty, inform the DG to take the necessary actions, engage someone who works in the AIG section, etc.)
- The system includes a procedure containing all the actions need to receive and process the notifications



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SAFETY

Receiving and processing notifications without delay

6.315 Has the State established and implemented a system to ensure that:

...

2) the contact details for the notification to the investigation authority have been made publicly available and notified to ICAO?

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...

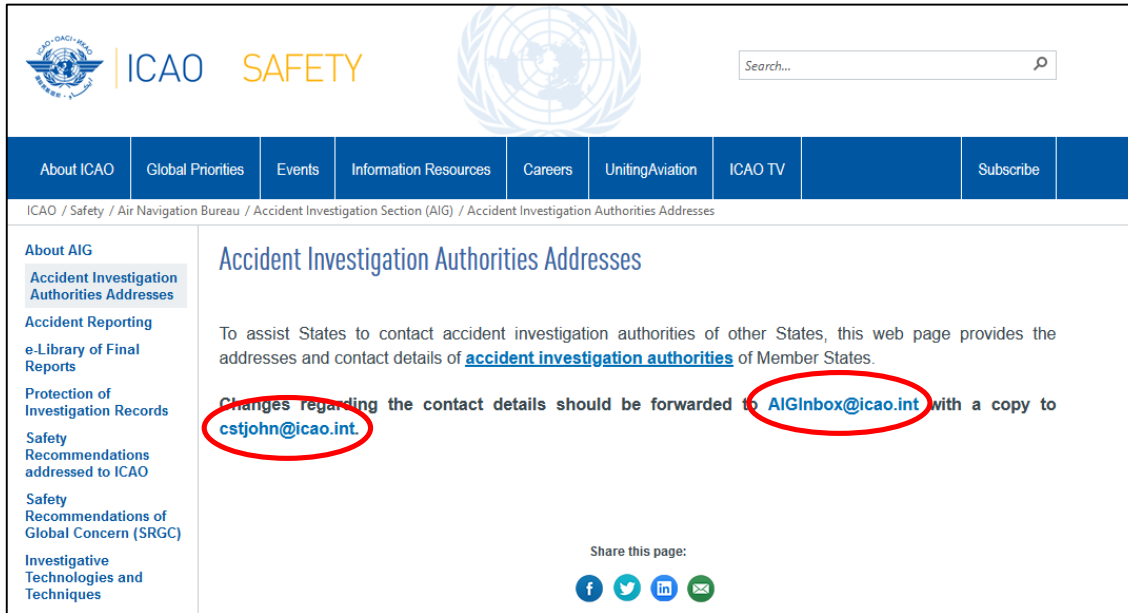
2) the contact details for the notification to the investigation authority have been made publicly available and notified to ICAO?

The up-to-date details necessary to address the notification to the AIA (i.e. 24/7 telephone numbers, e-mail, fax numbers, website) need to be available to the public and to other States (through ICAO website)

6.315 Has the State established and implemented a system to ensure that:

...

2) the contact details for the notification to the investigation authority have been made publicly available and notified to ICAO?



The screenshot shows the ICAO SAFETY website. The header includes the ICAO logo, the text 'ICAO SAFETY', and a search bar. A navigation menu contains links for 'About ICAO', 'Global Priorities', 'Events', 'Information Resources', 'Careers', 'Uniting Aviation', 'ICAO TV', and 'Subscribe'. The breadcrumb trail reads: 'ICAO / Safety / Air Navigation Bureau / Accident Investigation Section (AIG) / Accident Investigation Authorities Addresses'. The main content area is titled 'Accident Investigation Authorities Addresses' and contains the following text: 'To assist States to contact accident investigation authorities of other States, this web page provides the addresses and contact details of [accident investigation authorities](#) of Member States. Changes regarding the contact details should be forwarded to AIGInbox@icao.int with a copy to cstjohn@icao.int.' The email addresses are circled in red. A sidebar on the left lists various sections like 'About AIG', 'Accident Investigation Authorities Addresses', 'Accident Reporting', etc. At the bottom, there are social media sharing icons for Facebook, Twitter, LinkedIn, and RSS.

Please additionally put the NACC Regional Office in copy

NACC-AIG@icao.int



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Assistance to aircraft accident victims and their families

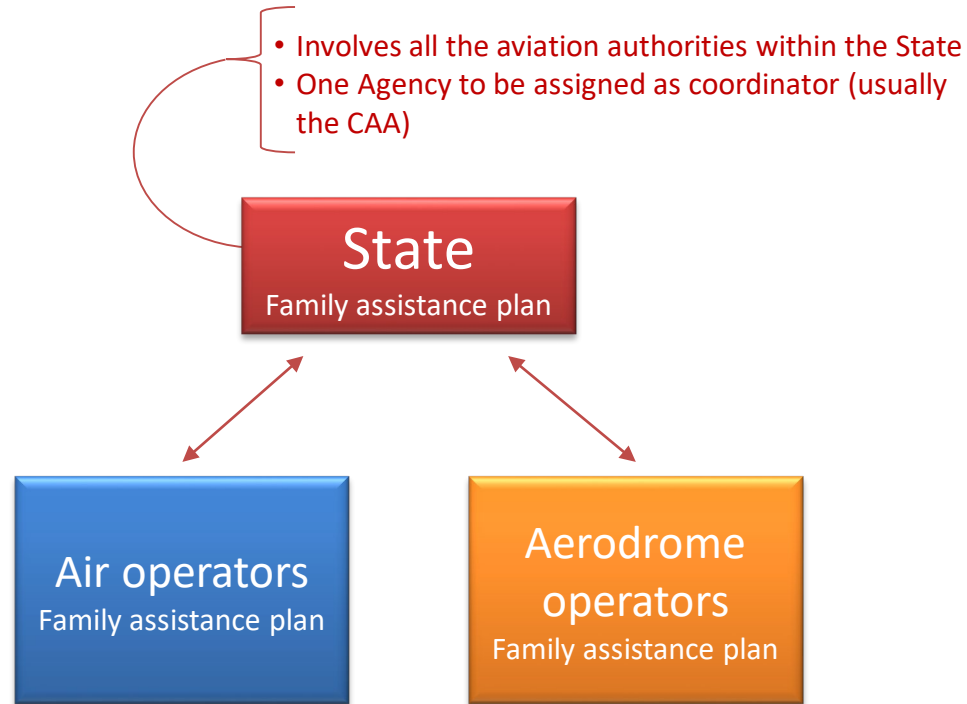
6.383 Has the State established a comprehensive system for providing assistance to aircraft accident victims and their families?

6.383 Has the State established a comprehensive system for providing assistance to aircraft accident victims and their families?

Legislation and/or policies shall establish family assistance plans that address:

- Scope
- Responsibilities
- Roles
- Coordination

6.383 Has the State established a comprehensive system for providing assistance to aircraft accident victims and their families?



6.383 Has the State established a comprehensive system for providing assistance to aircraft accident victims and their families?

SCOPE

The scope of the assistance shall include:

- Information
- Medical support
- Psychological support
- Transportation, accommodation and food
- Places to meet and provide assistance

6.383 Has the State established a comprehensive system for providing assistance to aircraft accident victims and their families?

CAA: Ensure that airlines and aerodrome operators have their comprehensive and up-to-date assistance plan (through regulation and oversight)

AIA: Timely provide information on the progress of the investigation

** Other authorities may be involved to provide information*

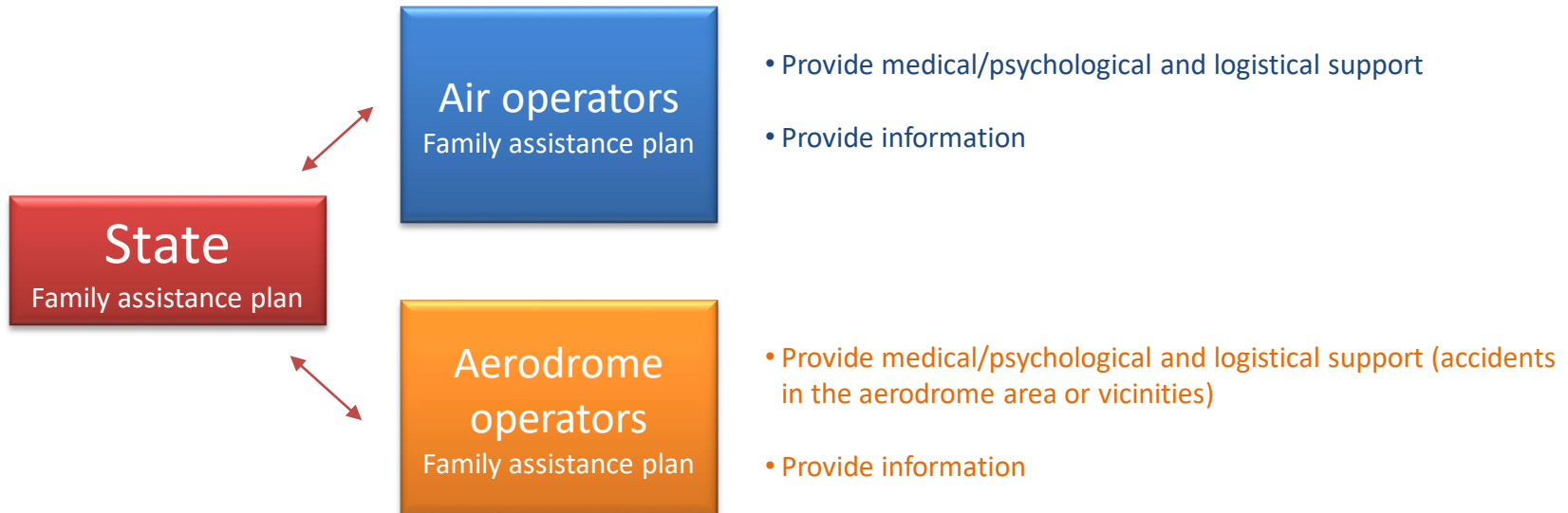
State
Family assistance plan

Air operators
Family assistance plan

Aerodrome operators
Family assistance plan



6.383 Has the State established a comprehensive system for providing assistance to aircraft accident victims and their families?





Mandatory incident reporting

6.501 Has the State established and implemented (through the necessary legislation, procedures and guidance to the industry) a mandatory incident reporting system to facilitate the collection of information on actual or potential safety deficiencies?

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Mandatory
incident
reporting system



Notification of
accidents and
incidents

Notification of accidents and incidents



Mandatory incident reporting system

- To the investigation authority
- Determine immediate actions by the State
- ASAP and by the quickest means available
- Mandatory for accidents and serious incidents

- To the authority in charge of SSP
- Doesn't determine any immediate actions by the State
- Usually made periodically or days after the event (e.g. every Wednesday, or within 72 hours, etc.)

Mandatory
incident
reporting system

- The regulation needs to determine:
 - Which types of incident shall be reported
 - Who is obliged to report
 - The timelines for reporting
 - To whom the report will be directed
- The guidance shall provide the industry with details on:
 - How to report (website, forms, e-mail, etc.)
 - The types of incident to be reported
 - The information required in each report
- Database:
 - The reports shall be inserted in a database from the State
 - Preferably the same where accident and serious incidents are

Note: Effective implementation will be verified by the auditor by assessing the number of reports received (commensurate with the level of aviation activity)



Accident and incident database

6.507 Has the State established an accident and incident database, in a standardized format, to facilitate the effective analysis of information on actual or potential safety deficiencies and to determine any preventive actions required?

6.507 Has the State established an accident and incident database, in a standardized format, to facilitate the effective analysis of information on actual or potential safety deficiencies and to determine any preventive actions required?

- This is the database of the investigation authority (with access to the State's SSP)
- It needs to be ADREP compatible
- ECCAIRS is the recommended software to be used (but it is not mandatory)
- The amount of data needs to reflect the complexity of the State and needs to contain all the accidents, serious incidents and investigated incidents

Note: It is expected to have a lot of serious incidents for each accident (Heinrich and Bird pyramids)

Several air traffic serious incidents are expected



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SAFETY

Agenda

- ✈ Understanding and drafting models of the processes and measures required in AIG
- ✈ Understanding and drafting models of the systems required in AIG
- ✈ Identifying and drafting the organization/structure of the means required in AIG



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SAFETY

AIG Means

- ✈ Ensure provision of the necessary, up-to-date documentation
- ✈ Ensure the proper maintenance of investigation files
- ✈ Ensure the availability of hangars/storage facilities when needed



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SAFETY

AIG Means

- ✈ Correct and up-to-date contact information of AIG authorities to be made available and used
- ✈ Ensure cooperation and separation between the AIG authority and the judicial authorities



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Ensure provision of the necessary, up-to-date documentation

6.209 Has the investigation authority established and implemented means to ensure that its investigators are provided with the necessary, up-to-date documentation to effectively accomplish their functions and responsibilities?

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Wrong reference:

GM
Doc 9756
Part I, 2.6.1.1, 2.6.2 &
App. 8

6.209 Has the investigation authority established and implemented means to ensure that its investigators are provided with the necessary, up-to-date documentation to effectively accomplish their functions and responsibilities?

Wrong reference:

GM
Doc 9756
Part I, 2.1.1.1, 2.1.2 &
App. 8

The correct would be: 2.7.1.1, 2.7.2 and App. 8

6.209 Has the investigation authority established and implemented means to ensure that its investigators are provided with the necessary, up-to-date documentation to effectively accomplish their functions and responsibilities?

Information to be provided includes:

- ICAO documentation
- Manufacturers' documents
- Plans
- Processes
- Procedures
- Checklists

6.209 Has the investigation authority established and implemented means to ensure that its investigators are provided with the necessary, up-to-date documentation to effectively accomplish their functions and responsibilities?

Documentation needs to be up-to-date:

- Control of internal documents
- Membership or internal control of currency of 3rd party documentation

- May be hard copy and/or digital
- Access must be granted to all investigators



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Ensure the proper maintenance of investigation files

6.210 Has the investigation authority established and implemented means to ensure the proper maintenance of aircraft accident and serious incident investigation files?

6.210 Has the investigation authority established and implemented means to ensure the proper maintenance of aircraft accident and serious incident investigation files?

Investigation files
(*includes sensitive information*)

- Aircraft documents (CR, CA, Maintenance registers, relevant aircraft manuals, engine documentation, etc.)
- Crew (Licences, experience, rates, training records, medical cert., etc.)
- Meteorological information (Reports, METAR, SIGMET, etc.)
- Records of the examination and testing of the system or component
- Graphs, calculations, studies, etc.
- Photographs, diagrams, etc.
- Investigation reports (preliminary, final and ADREP data)
- Etc.

6.210 Has the investigation authority established and implemented means to ensure the proper maintenance of aircraft accident and serious incident investigation files?

Hard copy files

- Whenever possible, make soft copy back-ups
- To be stored in an organized folder (with index, numbered pages and divided in accordance with a pre-established criteria)
- Folder to be kept in a safe environment and organized in accordance with a pre-established criteria
 - An appropriate room equipped with cabinets for archiving documents
 - Fire protection
 - Accessible by authorized persons only

6.210 Has the investigation authority established and implemented means to ensure the proper maintenance of aircraft accident and serious incident investigation files?

Soft copy files

- To be stored in an organized folder (with index and divided in accordance with a pre-established criteria)
- Folder to be kept in a safe environment and organized in accordance with a pre-established criteria
 - Accessible by authorized persons only
 - Preferably segregated from internet
- Back-up



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SAFETY

Ensure the availability of hangars/storage facilities when needed

6.211 Has the State established and implemented arrangements and/or procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the purposes of the investigation?

6.211 Has the State established and implemented arrangements and/or procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the purposes of the investigation?

Key elements:

1. Arrangements and/or procedures
2. Hangars/storage facilities
3. Maintain safe custody
4. Period necessary

6.211 Has the State established and implemented arrangements and/or procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the purposes of the investigation?

Arrangements and/or procedures:

- Arrangements:
 - They may be MoUs, contracts (e.g. rental, assignment of temporary use, etc.), legislation (when referring to a public area), owning their own areas, etc.
 - They are necessary to secure the commitment to authorize the use of the site to the authority in case of need
- Procedures:
 - May apply to complement the arrangement with the appropriate level of details regarding how this use will be authorized and put in place
 - May also address the access control and other issues

6.211 Has the State established and implemented arrangements and/or procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the purposes of the investigation?

Hangars/storage facilities:

- The investigation authorities need to have spaces to store wreckage, parts and components during investigations
- For large States, consideration must be given to the needs of having storage facilities in more than one region (to cover the needs of the investigation), or to have the appropriate means for the timely transportation of the wreckage from the site to the storage facility

6.211 Has the State established and implemented arrangements and/or procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the purposes of the investigation?

Maintain safe custody:

- The facilities need to ensure the appropriate level of protection to the wreckage to avoid deterioration, damages, pilfering and any circumstance that could affect the characteristics of the material in a way that jeopardizes its use in the investigation
- For large States, consideration must be given to the needs of having storage facilities in more than one region (to cover the needs of the investigation), or to have the appropriate means for the timely transportation of the wreckage from the site to the storage facility
- In sensitive cases (that involve judicial proceedings), safeguard measures must be put in place in coordination with the police or other relevant authorities to ensure safe custody (seal access doors, security, surveillance cameras, etc.)

6.211 Has the State established and implemented arrangements and/or procedures to ensure the availability of hangars/storage facilities when needed in order to protect the evidence and maintain safe custody of the aircraft for such a period as may be necessary for the purposes of the investigation?

Period necessary:

- The arrangement must ensure the availability for the period necessary (which is always uncertain)
- In the case of contracts, there has to be:
 - A clause to ensure the extension of the contract in the case the area is being used by the AIA (i.e. wreckage is being stored in the facility)
 - A procedure to opportunely guarantee the renewal of the current contract or a new contract, in order to maintain the permanent availability of storage facilities
- MoUs with a with predetermined term also require a renewal procedure



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Correct and up-to-date contact information of AIG authorities to be made available and used

6.311 Does the State have means in place to ensure that correct and up-to-date contact information of aircraft accident investigation authorities of other States is made available to, and used by the personnel in charge of forwarding accident or incident initial notifications to other States?

6.311 Does the State have means in place to ensure that correct and up-to-date contact information of aircraft accident investigation authorities of other States is made available to, and used by the personnel in charge of forwarding accident or incident initial notifications to other States?

- The ICAO website is supposed* to have the current information regarding the investigation authorities from all contracting States
- The list of contact information of investigation authorities is required as part of the notification procedure, where the State may either have a list of contact information as an appendix, or the procedure may direct to the ICAO website (more practical)
- If the State has a list with contact information, there has to be a procedure to ensure the list is kept up-to-date (this will be verified by the auditor)
- If the State directs to the ICAO website, everyone charged with tasks related to the notification to other States must have access and know how to access that webpage (this might also be checked by the auditor)

** States have the obligation to inform ICAO of any changes in their contact information of accident investigation authorities, thus the currency of the site depends on the compliance of the States*

6.311 Does the State have means in place to ensure that correct and up-to-date contact information of aircraft accident investigation authorities of other States is made available to, and used by the personnel in charge of forwarding accident or incident initial notifications to other States?

<https://www.icao.int/safety/airnavigation/AIG/Pages/default.aspx>

The screenshot shows the ICAO SAFETY website. At the top left is the ICAO logo with the text 'ICAO SAFETY'. To the right is a search bar. Below the header is a navigation menu with items: About ICAO, Global Priorities, Events, Information Resources, Careers, Uniting Aviation, ICAO TV, and Subscribe. The main content area has a breadcrumb trail: 'ICAO / Safety / Air Navigation Bureau / Accident Investigation Section (AIG) / Accident Investigation Authorities Addresses'. The page title is 'Accident Investigation Authorities Addresses'. The main text reads: 'To assist States to contact accident investigation authorities of other States, this web page provides the addresses and contact details of **accident investigation authorities** of Member States.' A red circle highlights the phrase 'accident investigation authorities' in the text. A red arrow points from this circle to the right, towards the text 'Link to the authorities contact information'. On the left side, there is a sidebar menu with items: About AIG, Accident Investigation Authorities Addresses (highlighted), Accident Reporting, e-Library of Final Reports, Protection of Investigation Records, Safety Recommendations.

Link to the authorities contact information



Accident Investigation Authorities Addresses

As of August 2021

DT for Dependent territory
NCS for Non-Contracting States

Country	Address
Afghanistan	<p>President of Civil Aviation Operations Ministry of Civil Aviation and Tourism Ansari Watt, P.O. Box 165 Kabul Afghanistan</p> <p>Tel.: (873) 68 2341450 / 49 Fax: (873) 68 1280784 AFTN: OAKBYAYX Cable: CIVAVIA Kabul</p>
Albania	<p>Ministry of Transport and Infrastructure National Investigation Body of Accid/Incid in Civil Aviation (OKIIA) 3, Rruga, Princ Vidi P.O. Box 74, Tirana Albania</p> <p>Tel.: +(355) 47 203-686 E-mail: info@okiaa.gov.al Website: www.okiaa.gov.al</p>
Algeria	<p>Ministère des transports Direction de l'Aviation civile et de la météorologie 119, rue Didouche Mourad Alger Algérie</p> <p>Tel.: (213) 2 74 06 81 (standard) (213) 2 74 76 30 (ligne Directeur directe) Fax: (213) 2 74 76 14 (213) 2 74 76 24 RSFTA: DAALYAYA SITA: ALGMTCR Telex: 66 129</p>
Andorra	<p>National Civil Aviation Administration Département des Transports et de l'Énergie Ministère de l'Économie</p>



Ensure cooperation and separation between the AIG authority and the judicial authorities

- 6.359 Has the State established and implemented means to ensure:
- a) the cooperation between the accident investigation authority and the judicial authorities, so that an investigation is not impeded by administrative or judicial investigations or proceedings; and
 - b) separation between the investigation conducted under Annex 13 and the one by the judicial authority?

6.359 Has the State established and implemented means to ensure:

a) the **cooperation** between the accident investigation authority and the judicial authorities, so that an investigation is not impeded by administrative or judicial investigations or proceedings; and

b) **separation** between the investigation conducted under Annex 13 and the one by the judicial authority?

Cooperation

- Access to and safety at the site of the accident
- Preservation of and access to the evidence
- Identification of victims/autopsies
- Flight recorder read-outs
- Examinations of relevant material/evidence
- Initial and ongoing debriefings of the status of each process
- Exchange of information
- Appropriate use of safety information
- Resolution of conflicts
- Training

- 6.359 Has the State established and implemented means to ensure:
- a) the **cooperation** between the accident investigation authority and the judicial authorities, so that an investigation is not impeded by administrative or judicial investigations or proceedings; and
 - b) **separation** between the investigation conducted under Annex 13 and the one by the judicial authority?

Separation

- Custody of evidence
- Examinations of relevant material/evidence
- Exchange of information (limited to factual)
- Statements/interviews
- Appropriate use of safety information
- Use of investigation reports
- Resolution of conflicts

- 6.359 Has the State established and implemented means to ensure:
- a) the **cooperation** between the accident investigation authority and the judicial authorities, so that an investigation is not impeded by administrative or judicial investigations or proceedings; and
 - b) **separation** between the investigation conducted under Annex 13 and the one by the judicial authority?

How to build cooperation with the judicial authority?

- Try to know with details what is the mission (mandate) of the authority and what sort of activities that authority performs
- Identify, among those activities, the ones that might be of interest for AIG
- Identify which of the capacities the AIG has that could be of interest for the judicial authority
- Try to establish contacts at the technical level to begin conversations, then try to draft (in coordination with them) the points of interest of each organization
- Once mature, try to level up the conversations



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Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU