



ICAO

International Civil Aviation Organization

Seventh Meeting of the Aerodromes Operations and Planning Sub-Group (AOP/SG/7)

Bangkok, Thailand, 3 to 6 July 2023

**Agenda Item 4: Provision of AOP in the Asia/Pacific Region**  
– **Reports of Working Group/Task Force Meetings**

**REPORT ON THE FIFTH MEETING OF THE ASIA/PACIFIC  
WILDLIFE HAZARD MANAGEMENT WORKING GROUP (AP-WHM/WG/5)**

(Presented by Chairman of AP-WHM/WG)

**SUMMARY**

This paper presents the Report of the Fifth Meeting of the Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM/WG/5) held in Bangkok, Thailand from 3 to 5 May 2023.

*Strategic Objectives:*

**A: Safety** – Enhance global civil aviation safety

**B: Air Navigation Capacity and Efficiency** — Increase the capacity and improve the efficiency of the global aviation system

**E: Environmental Protection** – Minimize the adverse environmental effects of civil aviation activities

**1. INTRODUCTION**

1.1 The Fifth Meeting of the Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM/WG/5) was held in Bangkok, Thailand from 3 to 5 May 2023.

1.2 The Meeting was attended by 46 participants from 13 Member States, Association of Asia Pacific Airlines (AAPA), Airports Council International (ACI), World Birdstrike Association (WBA) and ICAO.

1.3 There were 9 Working Papers, 5 Information Papers and 1 Presentations considered by AP-WHM/WG/5.

1.4 The full report of AP-WHM/WG/5 is available on ICAO APAC Office website at <https://www.icao.int/APAC/Meetings/Pages/2023-AP-WHM-WG5.aspx>

1.5 **Attachment A** to this paper provides a summary report on the outcome of AP-WHM/WG/5 for review by AOP/SG/7.

1.6 Appendices referred in this Working Paper and **Attachment A** carry the same Appendix numbers as those in the Report of AP-WHM/WG/5 for easy reference.

## 2. DISCUSSION

2.1 Some important discussions of the AP-WHM/WG/5 Meeting are summarized below.

### Draft Knowledge Article on Best Practices by WBA

2.2 The World Birdstrike Association (WBA) presented an overview of effective wildlife hazard management with a multi-faceted approach that involves regular surveys, effective control programs, personnel training, use of technology. The paper recommended that the airport wildlife hazard management should include assessments of habitat, food sources, and identify potential wildlife activities.

2.3 The paper highlighted following recommended standards developed by WBA:

- All aerodromes require to develop a comprehensive wildlife management plan that outlines specific strategies and procedures to prevent and mitigate wildlife hazards.
- Not all bird/wildlife species create risk to aviation. Senior managers must take responsibility for ensuring proper WHM plans / programs are implemented.
- All aerodromes require to review features that attract hazardous birds/wildlife and develop a management plan to eliminate or reduce the quantity of those features.
- Wildlife attractants should be listed, considering that natural and anthropogenic environments are attractive to wildlife. Once the attractants are identified, management plans should be developed to reduce / remove / deny wildlife's access to the attractants.
- Effective habitat management and wildlife repelling at airfields requires a multi-faceted approach that combines a range of different strategies. This can be achieved by setting up regular habitat events and monitoring them using technology tools.
- Strike reporting must follow the State's and ICAO format and be submitted to the State's authorities via IBIS reporting.
- A wildlife assessment survey in an airfield evaluates the presence and behaviour patterns of wildlife species to identify potential hazards to aircraft operations and develop strategies to reduce the risk of wildlife strikes with aircrafts.
- A properly trained and equipped wildlife control agent should be present at the aerodrome from dawn to dusk on a daily basis to monitor, record observations and scare wildlife if required to reduce strike risks.
- Wildlife control units shall consider all flights, including commercial, general aviation, and military flights, in their strike analysis.
- All wildlife control staff should receive proper training in the use of wildlife control devices, and periodic refresher training should be conducted.
- Technology smart application to enable users to record species and numbers of wildlife/birds, mammals, and reptiles with ease.

- Aerodrome staff should be encouraged to report wildlife strikes to airport managers, and strikes should never be used as a performance measure of bird/wildlife controllers.
- Managing the strike risk that originates from off the airfield is a more complex and difficult challenge.
- Overall aviation effective wildlife hazard management requires a multi-faceted approach that involves regular surveys, effective control programs, training, use of technology and collaboration with local authorities and stakeholders. By implementing knowledge of best practices, the risk of wildlife strikes can be minimised and aviation safety can be ensured.

State Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme

2.4 The Secretariat presented the “*Generic Template on State’s Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme*” developed by the AP-WHM/WG and approved by the APANPIRG/33 Meeting held on 22 – 24 November 2022 in Bali, Indonesia as per recommendation of the AOP/SG/6 Meeting (27 to 30 June 2022, VTC).

2.5 The Generic Template - State Action Plan for Establishment and Implementation of WHMP is available on ICAO APAC Website at eDocuments under AGA heading (<https://www.icao.int/APAC/Pages/eDocs.aspx>).

2.6 AP-WHM/WG/5 urged States to take necessary action in accordance with **Conclusion APANPIRG/33/4** and update the progress on their implementation of the Action Plan at the AP-WHM/WG/6.

2.7 India and Pakistan agreed to provide progress update on implementation of their Action Plan at the AP-WHM/WG/6 Meeting in 2024.

Proposal for an Amendment to the Terms of Reference of AP-WHM/WG

2.8 The Secretariat presented a proposal for an amendment to the current terms of reference of AP-WHM/WG.

2.9 The TOR was proposed to be amended to include in its scope an assistance to States through “Asia-Pacific WHM Go-Team” missions as proposed in AP-WHM/WG/5 - **WP/05** presented by ACI and maintain the register of the WHM Experts nominated by States and Industry Partners (AP-WHM/IP-02 refers). The additional scopes of the Working Group were incorporated in the proposed amendment to the TOR of the AP-WHM/WG provided in **Appendix A**. The proposed amendment to the TOR would allow additional time for this Working Group to focus on the implementation aspects, such as, onsite technical assistance to States for establishment of the National Wildlife Hazard Management Committee, Wildlife Hazard Management Programme, conducting WHM workshops/seminars/trainings, customization of Asia-Pacific Generic Guidance Materials for developing State’s Guidance Materials, providing on-the-job trainings to States’s Aerodrome Inspectors (WHM) as and when necessary, continue to carry out the ongoing tasks and complete the new task (Tasks 5/1 to 5/5) added to the Working Group’s Task List and provide some flexibility in the mode of conducting meetings amid the aftermath of COVID-19 pandemic.

2.10 As the proposal for an amendment to AP-WHM/WG’s TOR was supported by all participating States and International Organizations, the AP-WHM/WG/5 endorsed the following Draft Decision for consideration by AOP/SG/7:

<b>Draft Decision AP-WHM/WG/5-1: Proposal for Amendment to AP-WHM/WG’s TOR</b>	
<b>What:</b> That, the Terms of Reference of the Asia/Pacific Wildlife Hazard Management Working Group (AP-AA/WG) be amended as provided in <b>Appendix A</b> to the Report of AP-WHM/WG/5.	<b>Expected impact:</b> <input type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
<b>Why:</b> To allow additional three years of time for Working Group to focus on the onsite technical assistance to States for establishment of the National Wildlife Hazard Management Committee, Wildlife Hazard Management Programme, conduct new tasks of the TOR, and to provide some flexibility in the mode of meetings amid the aftermath of COVID-19 pandemic.	<b>Follow-up:</b> <input checked="" type="checkbox"/> Required from States
<b>When:</b> 6-Jul-23	<b>Status:</b> Draft to be adopted by Subgroup
<b>Who:</b> <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: AP-WHM/WG	

AP-WHM/WG TOR and Task List

2.11 AP-WHM/WG/5 Meeting reviewed the Task List, and the updated Task List provided in **Appendix B** to the Report of AP-WHM/WG/5.

2.12 WBA has developed the WHM questionnaire, circulated to participants of the AP-WHM/WG/5 and requested to response to the questionnaire by July 2023. WBA’s WHM questionnaire is provided in **Appendix C**.

ICAO Asia-Pacific Wildlife Hazard Management Go-Team Methodology (WP/05)

2.13 ICAO Asia and Pacific Office had conducted a survey in 2019 and 2020 based on the survey questionnaire developed by the AP-WHM/WG to better understand the technical needs of States in WHM and produced a number of guidance materials in WHM. A number of webinars/workshops in WHM, both in person and online, had also been conducted for States and aerodrome operators.

2.14 Complementary to guidance materials and webinars/workshops, a time-tested effective method to provide technical assistance is to organize a “Go Team mission” whereby a team of experts in the relevant areas is sent to the State concerned to review the situation on site and to coach and mentor the personnel there.

2.15 To achieve the above purpose, the ACI developed and presented the methodology for planning, coordination, execution and follow up on Go-Team missions to assist States in WHM field. The detailed methodology provided in **Appendix D** was reviewed by the AP-WHM/WG/5 and the Meeting endorsed the following Draft Conclusion for endorsement by AOP/SG/7 and further consideration by APANPIRG/34:

<b>Draft Conclusion AP-WHM/WG/5-2: ICAO Asia/Pacific WHM Go-Team Methodology</b>	
<b>What:</b> That, <ul style="list-style-type: none"> <li>• The needs for technical assistance in the area of WHM for ICAO APAC States be periodically reviewed;</li> <li>• States with such needs be encouraged and invited to host WHM missions; and</li> <li>• The methodology for running such Go-Team missions provided in <b>Appendix D</b> to the Report of the AP-WHM/WG/5 be endorsed by AOP/SG/7 and adopted by APANPIRG/34.</li> </ul>	<b>Expected impact:</b> <input checked="" type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical
<b>Why:</b> To assist States in WHM	<b>Follow-up:</b> <input checked="" type="checkbox"/> Required from States
<b>When:</b> 13-Dec-23	<b>Status:</b> Draft to be adopted by PIRG
<b>Who:</b> <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: AP-WHM/WG	

IBIS Focal Points for Asia and Pacific States

2.16 The Secretariat presented the list of ICAO Bird Strike Information System (IBIS) Focal Points of Asia and Pacific States for review and update by the Meeting.

2.17 ICAO HQs requested all ICAO Regional Offices to update the information of the IBIS Focal Points and send them to ICAO HQs by 31 May 2023.

2.18 As informed to the AP-WHM/WG/5 Meeting, the ICAO APAC Office circulated the list of the IBIS Focal Points of Asia Pacific States along with the State Letter requesting for verification and updating of the list.

2.19 The List of ICAO Bird Strike Information System (IBIS) Focal Points of Asia and Pacific States has been updated based on information provided by States and available in **Appendix E**.

Information Papers and Presentations

2.20 The following Information papers and presentations were considered by AP-WHM/WG/5:

- 1) List of Experts of Asia/Pacific Wildlife Hazard Management Working Group (IP/02);
- 2) Update on Activities and Progress of International WHM SME Group (IP/03);
- 3) Summary of Australian Aviation Wildlife Hazard Group (AAWHG) Forum – 14-15 September 2022, Adelaide, Australia (IP/04);
- 4) Summary of Wildlife Hazard Management Workshop between Australia and Indonesia, 17 January 2023 (IP/05); and
- 5) Update on the Manual for Strike Reporting and the IBIS (Doc 9332) (PPT/01).

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) review the Summary Report on the Fifth Meeting of AP-WHM/WG (**Attachment A**);
- b) review and endorse the **Draft Decision** as presented in paragraph 2.10 for consideration by AOP/SG/7;
- c) review the **Draft Conclusion** as presented in paragraph 2.15 for endorsement by AOP/SG/7 and consideration by APANPIRG/34;
- d) discuss any relevant matters as appropriate.

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**Summary Report of the AP-WHM/WG/5 Meeting**

**HISTORY OF THE MEETING**

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**1. Introduction**

1.1 The Fifth Meeting of the Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM WG/5) was held in Bangkok, Thailand from 3 to 5 May 2023.

**2. Attendance**

2.1 The Meeting was attended by 46 participants from 13 Member States, Association of Asia Pacific Airlines (AAPA), Airports Council International (ACI), World Birdstrike Association (WBA) and ICAO.

2.2 9 Working Papers, 5 Information Papers and 1 Presentation were considered by the Meeting.

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**Agenda Item 1: Adoption of Provisional Agenda (WP/01)**

1.1 The Provisional Agenda presented in WP/01 was adopted as Agenda for the Meeting.

Agenda Item 1: Adoption of agenda

Agenda Item 2: Review outcomes of related Meetings/Seminars

Agenda Item 3: Global, Regional and National Guidance/Best Practices on Wildlife Hazard Management

Agenda Item 4: Progress Update on Tasks assigned to States and International/Regional Organizations

Agenda Item 5: State's Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme – State's Update

Agenda Item 6: AP-WHM WG TOR and Task List

Agenda Item 7: Any Other Business

Agenda Item 8: Date and Venue of Next Meeting

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**Agenda Item 2: Review Outcomes of related Meetings/Seminars**Outcomes of APANPIRG/33 and AOP/SG/6 Meetings (WP/02)

2.1 The Secretariat provided outcomes of AOP/SG/6 (27 to 30 June 2022) and APANPIRG/33 (22 to 24 November 2022) Meetings related to the Asia Pacific Wildlife Hazard Management Working Group (AP-WHM/WG). The Report of AOP/SG/6 and APANPIRG/33 Meetings could be accessed at:

<https://www.icao.int/APAC/Meetings/Lists/Meeting%20List%202022/AllItems.aspx>

2.2 AP-WHM/WG/5 noted that APANPIRG/33 had adopted the following Conclusion related to Wildlife Hazard Management (WHM):

***Conclusion APANPIRG/33/4: State Action Plan for Establishment and Implementation of WHMP - Generic Template***

*That, Asia/Pacific States are urged to:*

- *Develop “State Action Plan for Establishment and Implementation of WHMP” in accordance with the generic template in **Appendix C to the Report on Agenda Item 3.1** assigning State responsible entities and targeted implementation dates (milestones); and*
- *Commence to execute the State Action Plan the latest from first quarter of 2023, and in accordance with the proposed targeted implementation date (milestone) and complete all actions by 2026.*

2.3 AP-WHM/WG/5 also noted that the *Generic Template – State Action Plan for Establishment and Implementation of WHMP* was made available on ICAO APAC Website at eDocuments under AGA heading (<https://www.icao.int/APAC/Pages/eDocs.aspx>) and the State Letter Ref.: AN 3/3 – AP014/23 (AGA) requesting States to take necessary action regarding Conclusion APANPIRG/33/4 was circulated to States on 24 January 2023.

2.4 AP-WHM/WG/5 further noted that AOP/SG/6 had approved:

- 1) the *Asia Pacific Regional Guidance on Development and Implementation of Wildlife Hazard Management Programme* developed by the AP-WHM/WG; and
- 2) the *Procedure for periodic review and update of the Asia/Pacific Generic Guidance Materials in the area of Aerodromes and Ground Aids* along with the names and contact details of the Custodians from States and International Organization;

and both documents were made available on the ICAO Asia/Pacific Regional Office eDocuments webpage: <https://www.icao.int/APAC/Pages/eDocs.aspx> under AGA heading.

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**Agenda Item 3: Global, Regional and National Guidance/Best Practices on Wildlife Hazard Management**Draft Knowledge Article on Best Practices by WBA (WP/08)

3.1 The World Birdstrike Association (WBA) presented an overview of an effective wildlife hazard management with a multi-faceted approach that involves regular surveys, effective control programs, personnel training, use of technology. The paper recommended that the airport wildlife hazard management should include assessments of habitat, food sources, and identify potential wildlife activities.

3.2 The paper highlighted following recommended standards developed by WBA:

- All aerodromes require to develop a comprehensive wildlife management plan that outlines specific strategies and procedures to prevent and mitigate wildlife hazards.
- Not all bird/wildlife species create risk to aviation. Senior managers must take responsibility for ensuring proper WHM plans / programs are implemented.
- All aerodromes require to review features that attract hazardous birds/wildlife and develop a management plan to eliminate or reduce the quantity of those features.
- Wildlife attractants should be listed, considering that natural and anthropogenic environments are attractive to wildlife. Once the attractants are identified, management plans should be developed to reduce / remove / deny wildlife's access to the attractants.
- Effective habitat management and wildlife repelling at airfields requires a multi-faceted approach that combines a range of different strategies. This can be achieved by setting up regular habitat events and monitoring them using technology tools.
- Strike reporting must follow the State's and ICAO format and be submitted to the State's authorities via IBIS reporting.
- A wildlife assessment survey in an airfield evaluates the presence and behaviour patterns of wildlife species to identify potential hazards to aircraft operations and develop strategies to reduce the risk of wildlife strikes with aircrafts.
- A properly trained and equipped wildlife control agent should be present at the aerodrome from dawn to dusk on a daily basis to monitor, record observations and scare wildlife if required to reduce strike risks.
- Wildlife control units shall consider all flights, including commercial, general aviation, and military flights, in their strike analysis.
- All wildlife control staff should receive proper training in the use of wildlife control devices, and periodic refresher training should be conducted.
- Technology smart application to enable users to record species and numbers of wildlife/birds, mammals, and reptiles with ease.
- Aerodrome staff should be encouraged to report wildlife strikes to airport managers, and strikes should never be used as a performance measure of bird/wildlife controllers.

- Managing the strike risk that originates from off the airfield is a more complex and difficult challenge.
- Overall aviation effective wildlife hazard management requires a multi-faceted approach that involves regular surveys, effective control programs, training, use of technology and collaboration with local authorities and stakeholders. By implementing knowledge of best practices, the risk of wildlife strikes can be minimised and aviation safety can be ensured.

#### Update on Activities and Progress of International WHM SME Group (IP/03)

3.3 A brief introduction and update on the progress and activities of the International Wildlife Hazard Management (WHM) Subject Matter Expert (SME) Group were presented by the Chair of Australian Aviation Wildlife Hazard Group (AAWHG). The Group is a disparate collective of SMEs from around the globe and most established aviation spheres as well as biology/science and was interested in improving wildlife strike mitigation across all spheres of influence, re-balancing the risk equation. This intention stemmed from an observation that aerodromes were often disproportionately burdened with risk ‘assessment’ rather than concentrating on hazard management and communication when the risk assessment should be considered and calculated by the users of the airspace and/or aerodrome and risk-based decisions of acceptability made as occurs for weather events or phenomenon like volcanic ash. Wildlife Hazard Management is a shared responsibility with each stakeholder owning its risk. WHM is a system-wide problem concerning all aviation stakeholders. Through the understanding of this and the integration of the management of this hazard and the associated risk the aviation system can realise a shared responsibility and therefore a shared safety outcome.

3.4 It was agreed that the update on the outcomes of the future meeting of the International WHM SME Group would be provided at the next AP-WHM/WG Meeting.

#### Summary of Australian Aviation Wildlife Hazard Group (AAWHG) Forum – 14-15 September 2022, Adelaide, Australia (IP/04)

3.5 This paper presented a brief summary of the outcomes of the two-day WHM forum facilitated by AAWHG in Adelaide, Australia on 14-15 September 2022. The AAWHG Forum attracts professionals from across the aviation industry, including airport operators and ground crew, airlines, pilots, service and equipment suppliers, wildlife specialists, trainers, ATC, accident investigators and regulators. Eight sessions across two-days were facilitated and attended by over 100 participants. The presentations are available for download at the AAWHG website; [www.aawhg.org/events/2022-forum/](http://www.aawhg.org/events/2022-forum/). The risks posed to aviation through realization of wildlife hazards is one that reaches all aspects and domains of the aviation system. The hazard is not uniquely an aerodrome problem but is a system-wide problem and through the understanding of this and the integration of the management of this hazard and the associated risk truly effective outcomes could be realised in even the most challenging of environments and across all aviation domains.

#### Summary of Wildlife Hazard Management Workshop between Australia and Indonesia, 17 January 2023 (IP/05)

3.6 This paper presented the outcomes of a one-day workshop facilitated by Australia with Indonesia in January 2023 on Wildlife Hazard Management and the establishment of a national wildlife hazard management committee in Indonesia. The DGCA identified wildlife hazard management as an ongoing priority in Indonesia’s aviation environment. The workshop had excellent attendance and with representation across the full range of technical domains in aviation relevant to WHM, including aerodromes, air operators, air navigation service provider including senior management. At the conclusion of the workshop, a decision was made to formally establish a national committee in Indonesia. With specific consideration to their situation, Indonesia had decided the Committee would

feature Co-Captains (Co-chairs) from the DGCA, Air Operators, AirNav Indonesia and Aerodromes. This initiative of multiple co-chairs displays positive signs of a high level of accepted responsibility beyond just at the airport level. The hazard is not uniquely an aerodrome problem but is a system-wide challenge. Through the understanding of this and integration of the management of this hazard and the associated risk into the State level system of management known as the State Safety Programme (SSP), effective outcomes could be realised in even the most challenging of environments and across all aviation domains.

#### Update on the Manual for Strike Reporting and the IBIS (Doc 9332) (PPT/01)

3.7 The ICAO Birdstrike Information System (IBIS) Manual Doc 9332 (3rd edition published in 1989) has not been updated in over 30 years. Two related, but separate initiatives were proposed to ICAO in 2020. The first proposed to update the IBIS manual while the second proposed to allow and/or enhance international data access and data sharing. The goal was simple, enhance global aviation safety by improving member State reporting of wildlife/aircraft strike incidents and the submission of that data into IBIS as well as identifying and/or improving pathways to that data.

3.8 ADOP.015.03 was formalized on 2 February 2021 with the focus to update the IBIS manual; its deadline was Q4 2023 following an extension due to COVID-19. Advancements in data collection and reporting technologies require that the IBIS manual be completely reorganized, amended and modernized in its entirety. The Wildlife Hazard Management Expert Group (WHMEG) focused its voluntary efforts to aid individual member States with not only the submission of strike reports to the IBIS (as per Annex 14, Ch. 9.4.2) but with the collection, analysis and utilization of that strike data (as per Annex 14, Ch. 9.4.1).

3.9 Foundational challenges were addressed within the updated IBIS manual. In 2020, a universal definition of a wildlife strike was provided in Airport Services Manual Part 3 - *Wildlife Hazard Management* Fifth Edition. But, the updated IBIS manual shall provide critical guidance by defining what should be reported as a strike. It details who should report strikes, how and when member States should document strikes, and the many benefits of why documenting wildlife strikes is essential in mitigating wildlife risks. The IBIS manual would provide an updated strike report form that represents the universal minimum for all member States as well as strike data collection and documentation procedures, data validation that allows quality control / quality assurance and basic data analyses. Clarification would also be included on ideal key word usage (e.g., strike, bird strike, birdstrike, wildlife strike, report vs document, snarge vs remains, etc.).

3.10 The second proposed initiative to enhance international data access had a current deadline of Q4 2024. Currently, strike data submitted by member States within the IBIS is unavailable; it is inaccessible by member States that could use the data to improve their incomplete or inaccurate national wildlife strike databases and therefore enhance their understanding of wildlife risks.

3.11 Completion of these two initiatives would result in a global increase of documented strikes, an improvement in data quality and an effective, reliable use of that data towards the reduction of wildlife-related risks and financial losses to aviation.

The global expectations and benefits of strike data include:

- Member States need sufficient quality data to track national trends, determine hazard level of species struck, evaluate aerodrome wildlife hazard programs and provide scientific foundation for regulatory guidance concerning mitigation of risks from wildlife strikes;
- Aerodromes need sufficient quality data to identify and mitigate hazardous species, strike dynamics and wildlife attractants as well as the evaluation of the effectiveness of their wildlife management programs; and

- Industry (e.g., airframe and engine manufacturers) need sufficient quality data to evaluate the effectiveness of aircraft components.

3.12 As much as the benefits can be identified, so too can the consequences of incomplete or inaccurate strike data resulting in ineffective risk management at aerodromes or less than ideal guidance from States (e.g., targeting wrong species, inadequate or incorrect habitat attractant management, ineffective evaluation of wildlife hazard programs, etc.). Likewise, incomplete or inaccurate strike data may result in financial inefficiency and/or misappropriation (e.g., resources and personnel inadequate or misused). Both initiatives were on schedule for completion by their respective deadlines.

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**Agenda Item 4: Progress Update on Tasks assigned to States and International/Regional Organizations**

Nil.

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**Agenda Item 5: State's Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme – State's Update**

State Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme (WP/07)

5.1 The Secretariat presented the “*Generic Template on State's Action Plan for Establishment and Implementation of Wildlife Hazard Management Programme*” developed by the AP-WHM/WG and approved by the APANPIRG/33 Meeting held on 22 – 24 November 2022 in Bali, Indonesia as per recommendation of the AOP/SG/6 Meeting (27 to 30 June 2022, VTC).

5.2 The *Generic Template - State Action Plan for Establishment and Implementation of WHMP* is available on ICAO APAC Website at *eDocuments under AGA heading* (<https://www.icao.int/APAC/Pages/eDocs.aspx>).

5.3 AP-WHM/WG/5 urged States to take necessary action in accordance with **Conclusion APANPIRG/33/4** and update the progress on their implementation of the Action Plan at the AP-WHM/WG/6.

5.4 India and Pakistan agreed to provide progress update on implementation of their Action Plan at the AP-WHM/WG/6 Meeting in 2024.

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**Agenda Item 6: AP-WHM/WG TOR and Task List**

Proposal for an Amendment to the Terms of Reference of AP-WHM/WG (WP/03)

6.1 The Secretariat presented a proposal for an amendment to the current terms of reference of AP-WHM/WG.

6.2 Due to COVID-19 pandemic States and Administrations had re-organized their priorities. In addition, the travel restrictions implemented by States and Administrations had made the face-to-face meeting and onsite workshops/seminars and technical assistance to States impossible necessitating the additional time to fulfil its objective as envisaged.

6.3 As per **Conclusion APANPIRG/33/4**, Asia-Pacific States were urged to develop “*State Action Plan for Establishment and Implementation of WHMP*” and commence to execute the action plan from 1<sup>st</sup> quarter of 2023 to complete all actions by 2026.

6.4 Furthermore, based on the results of the analysis of the responses received from 23 States to the survey conducted in 2019 and 2020, it was noted that most of the Asia/Pacific States (11 among 23 responded States) either underperforming or if performing still needed direction/guidance with regards to Airport Wildlife Hazard Management Program, Safety Risk Assessment of Wildlife (Bird/Animal) Strike, Wildlife Prevention Measures inside and outside Aerodrome, Wildlife Strike Reporting and Training.

6.5 As a result, the TOR was proposed to be amended to include in its scope an assistance to States through “Asia-Pacific WHM Go-Team” missions as proposed in AP-WHM/WG/5 - **WP/05** presented by ACI and maintain the register of the WHM Experts nominated by States and Industry Partners (AP-WHM/IP-02 refers). The additional scopes of the Working Group were incorporated in the proposed amendment to the TOR of the AP-WHM/WG provided in **Appendix A**. The proposed amendment to the TOR would allow additional time for this Working Group to focus on the implementation aspects, such as, onsite technical assistance to States for establishment of the National Wildlife Hazard Management Committee, Wildlife Hazard Management Programme, conducting WHM workshops/seminars/trainings, customization of Asia-Pacific Generic Guidance Materials for developing State’s Guidance Materials, providing on-the-job trainings to States’s Aerodrome Inspectors (WHM) as and when necessary, continue to carry out the ongoing tasks and complete the new task (Tasks 5/1 to 5/5) added to the Working Group’s Task List and provide some flexibility in the mode of conducting meetings amid the aftermath of COVID-19 pandemic.

6.6 As the proposal for an amendment to AP-WHM/WG’s TOR was supported by all participating States and International Organizations, the AP-WHM/WG/5 endorsed the following Draft Decision for consideration by AOP/SG/7:

<b>Draft Decision AP-WHM/WG/5-1: Proposal for Amendment to AP-WHM/WG’s TOR</b>	
<p>What: That, the Terms of Reference of the Asia/Pacific Wildlife Hazard Management Working Group (AP-AA/WG) be amended as provided in <b>Appendix A</b> to the Report of AP-WHM/WG/5.</p>	<p>Expected impact:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Political / Global</li> <li><input type="checkbox"/> Inter-regional</li> <li><input type="checkbox"/> Economic</li> <li><input type="checkbox"/> Environmental</li> <li><input checked="" type="checkbox"/> Ops/Technical</li> </ul>

<b>Why:</b> To allow additional three years of time for Working Group to focus on the onsite technical assistance to States for establishment of the National Wildlife Hazard Management Committee, Wildlife Hazard Management Programme, conduct new tasks of the TOR, and to provide some flexibility in the mode of meetings amid the aftermath of COVID-19 pandemic.	<b>Follow-up:</b> <input checked="" type="checkbox"/> Required from States
<b>When:</b> 6-Jul-23	<b>Status:</b> Draft to be adopted by Subgroup
<b>Who:</b> <input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input checked="" type="checkbox"/> Other: AP-WHM/WG	

AP-WHM/WG TOR and Task List (WP/04)

6.7 The AP-WHM/WG/5 Meeting reviewed the Task List, and the updated Task List provided in **Appendix B**.

6.8 WBA has developed the WHM questionnaire, circulated to participants of the AP-WHM/WG/5 and requested to response to the questionnaire by July 2023. WBA's WHM questionnaire is provided in **Appendix C**.

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**Agenda Item 7: Any other Business**

ICAO Asia-Pacific Wildlife Hazard Management Go-Team Methodology (WP/05)

7.1 ICAO Asia and Pacific Office had conducted a survey in 2019 and 2020 based on the survey questionnaire developed by the AP-WHM/WG to better understand the technical needs of States in WHM and produced a number of guidance materials in WHM. A number of webinars/workshops in WHM, both in person and online, had also been conducted for States and aerodrome operators.

7.2 Complementary to guidance materials and webinars/workshops, a time-tested effective method to provide technical assistance is to organize a “Go Team mission” whereby a team of experts in the relevant areas is sent to the State concerned to review the situation on site and to coach and mentor the personnel there.

7.3 To achieve the above purpose, the ACI developed and presented the methodology for planning, coordination, execution and follow up on Go-Team missions to assist States in WHM field. The detailed methodology provided in **Appendix D** was reviewed by the AP-WHM/WG/5 and the Meeting endorsed the following Draft Conclusion for endorsement by AOP/SG/7 in July 2023 and consideration by APANPIRG/34 in November 2023:

<b>Draft Conclusion AP–WHM/WG/5–2: ICAO Asia/Pacific WHM Go-Team Methodology</b>			
What:	That,	Expected impact:	
	<ul style="list-style-type: none"> <li>The needs for technical assistance in the area of WHM for ICAO APAC States be periodically reviewed;</li> <li>States with such needs be encouraged and invited to host WHM missions; and</li> <li>The methodology for running such Go-Team missions provided in <b>Appendix D</b> to the Report of the AP-WHM/WG/5 be endorsed by AOP/SG/7 and adopted by APANPIRG/34.</li> </ul>	<input checked="" type="checkbox"/> Political / Global <input type="checkbox"/> Inter-regional <input checked="" type="checkbox"/> Economic <input type="checkbox"/> Environmental <input checked="" type="checkbox"/> Ops/Technical	
Why:	To assist States in WHM	Follow-up:	<input checked="" type="checkbox"/> Required from States
When:	29-Nov-23	Status:	Draft to be adopted by PIRG
Who:	<input checked="" type="checkbox"/> Sub groups <input checked="" type="checkbox"/> APAC States <input checked="" type="checkbox"/> ICAO APAC RO <input type="checkbox"/> ICAO HQ <input type="checkbox"/> Other: AP-WHM/WG		

IBIS Focal Points for Asia and Pacific States (WP/09)

7.4 The Secretariat presented the list of ICAO Bird Strike Information System (IBIS) Focal Points of Asia and Pacific States for review and update by the Meeting.

7.5 ICAO HQs requested all ICAO Regional Offices to update the information of the IBIS Focal Points and send them to ICAO HQs by 31 May 2023.

7.6 The Secretariat informed the Meeting that ICAO APAC Office would circulate the list of the IBIS Focal Points of Asia Pacific States along with the State Letter requesting for verification and updating of the list.

*Note: - Post AP-WHM/WG/5 Meeting the List of ICAO Bird Strike Information System (IBIS) Focal Points of Asia and Pacific States was updated based on information provided by States and available in **Appendix E***

List of Experts of Asia/Pacific Wildlife Hazard Management Working Group (IP/02)

7.7 AP-WHM/WG/5 noted the updated list of experts of AP-WHM/WG provided in **Appendix F**.

7.8 The Meeting urged Members of the Working Group to review the list, update the information of the listed experts and provide names and contact details of new WHM Experts nominated by the respective CAA of the State to ICAO APAC Office.

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**Agenda Item 8: Date and Venue of Next Meeting**Date and Venue of Next Meeting (WP/06)

8.1 The next meeting of AP-WHM/WG would be held in the last week of April/or early May 2024 for three to five days and should be in the form of face-to-face meeting. States/Administrations interested to host the AP-WHM/WG/6 were requested to contact the Secretariat. The venue of AP-WHM/WG/6 will be communicated to States/Administrations through ICAO APAC Invitation Letter.

Election of the Chairperson

8.2 Dr. Punya Raj Shakya, Secretary of the AP-WHM/WG invited the meeting to provide a nomination to the position of the Chairperson of the Working Group. The post would take effect from AP-WHM/WG/6 onwards.

8.3 Mr. Teeravee Yongwattajiranon, Aerodrome Standard Development Officer, Civil Aviation Authority of Thailand proposed Mr. Deo Chandra Lal Karn, Deputy Director General of Civil Aviation Authority of Nepal, to be the Chairperson of AP-WHM/WG for next four-year term. Mr. Teeravee Yongwattajiranon provided a brief resume of Mr. Karn's illustrious career achievements, with more than 30 years of experience in Civil Aviation including wide experience in WHM and expressed confidence that Mr. Karn would be able to provide an effective leadership to AP-WHM/WG for the next four years term. Mr. Karn's nomination was supported by all participating States and International Organizations. The meeting unanimously elected Mr. Deo Chandra Lal Karn as Chairperson of the AP-WHM/WG for the next four-year term.

8.4 Mr. Deo Chandra Lal Karn thanked the meeting for re-electing him as a Chairperson of AP-WHM/WG for the next four years and expressed appreciation for the tremendous support he received from States/Administrations and looked forward to the similar supports in future.

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**Closing of the Meeting**

9.1 Mr. Deo Chandra Lal Karn, Chairperson of the AP-WHM/WG, expressed sincere thanks and appreciation to the participants from States/Administrations, International Organizations (IOs) and members of ICAO WHM Expert Group for their contribution and support to AP-WHM/WG/5. He also expressed thanks to ICAO Secretariat for the excellent preparation of the meeting.

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**TERMS OF REFERENCE OF  
WILDLIFE HAZARD MANAGEMENT WORKING GROUP (WHM/WG)  
(Proposal for amendment to AP-WHM/WG's TOR)**

**Objective:**

To assist States to establish a National Wildlife Hazard Management Committee and ~~an Aerodrome~~ Wildlife Hazard Management Programme.

**Scope of works:**

To meet the above objectives the Working Group shall carry out the following tasks:

- 1) Develop a model TOR for National Wildlife Hazard Management Committee (NWHMC);
- 2) Monitor the establishment of a National Wildlife Hazard Management Committee by the States.
- 3) Assist in conducting workshop/seminar on Global and Regional Guidance on WHM;
- 4) Develop Asia Pacific Regional Guidance on ~~Aerodrome~~ Wildlife Hazard Management Programme, as needed;
- 5) Share the best practices on the measures adopted by member States/Administrations to prevent wildlife strike hazards at or in the vicinity of aerodromes;
- 6) Develop a performance measurement metrics to evaluate the effectiveness of the implementation of the ~~Aerodrome~~ Wildlife Hazard Management Programme ~~by the aerodrome operator~~; and
- 7) Be consistent with ICAO Annex 14, Volume I – Aerodrome Design and Operations, PANS-Aerodromes (Doc 9981), Doc 9137 Airport Services Manual, Part 3 – Wildlife Hazard Management, ICAO Bird Strike Information System (Doc 9332) and other requirements where applicable.
- 8) Analysis of the regional problems/issues in wildlife hazard management fields.
- 9) ~~To support~~ Support States with limited resources (human and financial) to enhance their capacity in Wildlife Hazard Management through workshops and technical assistance, such as, ICAO Asia/Pacific WHM Go-Team Mission, as needed;
- 10) Monitor and assist States in the establishment and implementation of National Wildlife Hazard Management Programme; and
- 11) Maintain the register of WHM Experts nominated by States and Industry Partners.

**Composition:**

The Working Group would be composed of subject matter experts nominated by APAC States / Administrations and International Organization satisfying the criteria:

- (1) Minimum 3 years of work experience in CAA Aerodrome Regulatory Department or NWHMC or in International Organizations or Aerodrome Operations at international airports in wildlife hazard management field;
- (2) Familiar with Annex 14 and related guidance materials (PANS-Aerodromes (Doc 9981); Airport Services Manual (Doc 9137), Part 3 – Wildlife Hazard Management, ICAO Bird Strike Information System (Doc 9332); and
- (3) The nominated expert will continue to be a member for a minimum of three consecutive years.

States in other ICAO regions and industry partners with experience in wildlife hazard management may also be invited to participate in the Working Group.

**Conduct of the work and timeframe:**

As far as practicable, the work would be carried out through electronic correspondences and web-conferences. ~~Minimum face-to-face meetings would be planned~~ The Working Group will hold at least one face-to-face meeting a year. Onsite assistance may be provided to States, if required, on cost-recovery basis through ICAO Asia/Pacific WHM Go-Team missions. The ICAO APAC Office would do necessary coordination. The ICAO COSCAPs will support the implementation of Tasks.

**Time frame:**

The Working Group would complete its work by September ~~2023~~ 2026.

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**AP-WHM/WG TASK LIST**

[Status Update: – ~~27 April 2022~~ Updated by AP-WHM/WG/5]

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
1/1	Develop a Generic Composition of National Wildlife Hazard Management Committee	AP-WHM/WG/1	AP-WHM/WG/1	Completed	AP-WHM/WG/1-WP/06
1/2	Develop a Generic Terms of Reference of National Wildlife Hazard Management Committee	AP-WHM/WG/1	AP-WHM/WG/1	Completed	AP-WHM/WG/1-WP/06
1/3	Develop survey questionnaire to analyze the State's problem/issues/deficiencies on wildlife hazards management including ICAO USOAP CMA WHM PQs	Sri Lanka, India, WBA	By the end of June 2019	Completed	
1/4	Send survey questionnaire to States/Member Administrations	Secretariat	By the end of July 2019 (giving 4 months of time for the completion of the Survey Questionnaires by States)	Completed	State Letter T 11/5.6 – AP069/19 (AGA) dated 18 July 2019
1/5	Analyze the State's problem/issues on wildlife hazards management based on completed survey questionnaires and present the report to AP-WHM/WG/2	Sri Lanka, India, WBA	AP-WHM/WG/2	Completed	AP-WHM WG/2-WP/11  Continued in Task 2/5
1/6	Present a case study on airport wildlife strike hazard assessment and implementation of mitigation measures	Thailand, India	AP-WHM/WG/2	Completed	AP-WHM WG/2 – WP/05 from Thailand

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
1/7	Request papers from ACI, CANSO, IFALPA, IFATCA and IATA to present their views on wildlife strike hazards at the Second Meeting of AP-WHM/WG	Secretariat	AP-WHM/WG/2	Completed	AP-WHM WG/2 – WP/03 from ACI and WP/04 from IFALPA
1/8	Develop a Generic Composition of Airport Wildlife Hazard Management Committee and its TOR	Nepal, Bhutan, Lao PDR	By the end of July 2019	Completed	Decision AOP/SG/3-6  Posted in ICAO APAC Website under e-Documents
1/9	Develop a Regional Guidance on Development and Implementation of Airport Wildlife Hazard Management Programme	Australia, Fiji, India, WBA, AAPA	December 2020 (Initial Draft)  (Final Draft)  AP-WHM/WG/4 (Final document)	Completed	AP-WHM WG/2 – WP/07 from Fiji  AP-WHM WG/3 – WP/08 (WBA, Australia, Fiji, India and AAPA)  AP-WHM WG/4 – WP/04 (Australia, Fiji, India, AAPA, ACI, IFALPA and WBA)
1/10	Encourage States to use IBIS electronic format or ECCAIRS to submit wildlife strike reports to ICAO	Bangladesh, Bhutan, Cambodia, Fiji, India, Lao PDR, Maldives, Nepal, Philippines, Sri Lanka, Thailand  Secretariat	From 1 <sup>st</sup> June 2019	Completed	State Letter T 11/5.6 – AP043/20 (AGA) dated 2 March 2020  AP-WHM WG/2-WP/02

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
1/11	Develop guidance for establishment of national procedure for recording and reporting wildlife strikes to aircraft	Philippines, Sri Lanka, Nepal, WBA, IFALPA  USA, Secretariat	Initial Draft by the end of December 2019  Final Draft by AP-WHM/WG/2  Review by December 2020	Completed  Completed  Completed	AP-WHM WG/2 – WP/08 from WBA   AP-WHM WG/3 – WP/05 (WBA, Nepal, Philippines, Sri Lanka and IFALPA)
1/12	Develop procedures for the collection of information from aircraft operators, aerodrome personnel and other sources on the presence of wildlife on or around the aerodrome constituting a potential hazard to aircraft operations	Philippines, Sri Lanka, Nepal, WBA, IFALPA  Secretariat	Initial Draft by the end of December 2019  Final Draft by AP-WHM/WG/2  Review by December 2020	Completed  Completed  Completed	AP-WHM WG/2 – WP/10 from WBA  Continued in Task 2/6 for remaining work  AP-WHM WG/3 – WP/05 (WBA, Nepal, Philippines, Sri Lanka and IFALPA)
1/13	Develop performance measurement indicators/metrics to evaluate the effectiveness of the implementation of Airport Wildlife Hazard Management Programme	Bangladesh, India, Thailand, WBA	Initial draft by the end of December 2019 and final draft by AP-WHM/WG/2	Completed	AP-WHM WG/2 – WP/06 from India  Continued in Task 2/7

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
2/1	Monitor the establishment of a National Wildlife Hazard Management Committee by the States [Scope of work – 2 as per ToR]	Secretariat – Issue State Letter based on AOP/SG/3 Conclusion.	July 2020	Ongoing	State Letter Ref.: A 3/3 – AP-104/19 (AGA) dated 17 September 2019  Report of the Survey analysis (AP-WHM WG/3 – WP/04 from WBA) 11 among 23 respondent States established NWHMC.

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
2/2	Assist in conducting workshop/seminar on Global and Regional Guidance on WHM [Scope of work – 3 as per ToR]	Australia, ACI  ICAO/ACI Regional Workshop on WHM – ACI to take the lead	<del>TBC in 2021</del>  AWHMP – 18 May 2021  Reporting and recording data on wildlife strikes and observed wildlife – July 2021  Wildlife safety risk assessment – 14 Sep. 2021	Ongoing  Completed  Completed  Completed	Possible timing: Australian Aviation Wildlife Hazard Group (AAWHG) Forum in September 2021 in Adelaide, Australia  ICAO/AAWHG WHM Webinar on 18 May 20  Conducted: Reporting and Recording Data on Wildlife Strikes on 20 July 2021  Wildlife Safety Risk Assessment on 14 September 2021 (WHMP)  Workshop on National Wildlife Hazard Management Programme conducted on 2 May 2023

	ACTION ITEM/PLANNED ACTIVITIES	RESPONSIBLE PARTY	TIME FRAME	STATUS	REMARKS
2/3	<p>Share the best practices on the measures adopted by member States/Administrations to prevent wildlife strike hazards at or in the vicinity of aerodromes</p> <p>a) Submission of best practices to Secretariat/ICAO APAC Office</p> <p>b) Review and select/consolidate the best practices for posting in ICAO APAC Website</p> <p>c) Publish the best practices in ICAO APAC Website</p>	<p>All States/Administrations</p> <p>Expert Group composed of the Chairman, Australia, Fiji, New Zealand, USA and WBA</p> <p>Secretariat</p>	<p><del>By December 2022</del></p> <p><del>Before AP-WHM/WG/5</del></p> <p>July 2023</p>	Ongoing	<p>Upload on ICAO APAC eDocuments:</p> <p>1) Australian Airports Association, <b>Practice Note 6</b> – Managing Bird Strike Risk – Species Information and <b>Practice Note 9</b> – Wildlife Hazard Management at Airports.</p>
2/4	Re-send survey questionnaire to States/Administrations that did not provide responses in Task 1/4	<p>Secretariat</p> <p>COSCAPs and PASO to assist in collection of responses</p>	June 2020 (2 months for States/Administrations to respond)	Completed	<p>Mark questions for responses by CAA and aerodromes</p> <p>State Letter Ref.: T 11 /5.6 – AP122/20 (AGA) dated 4 June 2020</p>

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
2/5	Based on the survey questionnaire responses:  a) Compile the results of the survey questionnaire and the problems / issues faced by States  b) Conduct needs analysis and present the recommendations on the prioritized actions to provide assistance to States as required, including future tasks for the WHM WG	WBA  Australia, China, Fiji, Indonesia, Malaysia, Nepal [Lead], New Zealand, Pakistan, Thailand, WBA	October 2020  AP-WHM/WG/5	Completed	Report of the Survey analysis (AP-WHM WG/3 – WP/04 from WBA)  AP-WHM/WG/4-Flimsy 1 presented by WBA
2/6	Develop a standardised real-time reporting format for aircrew in flight for transmitting the sighting of wildlife presence.	Australia, Philippines, Sri Lanka, Nepal, WBA, IFALPA [WBA to take the lead]	AP-WHM/WG/3  AP-WHM/WG/4 (Draft format)	Completed	AP-WHM WG/3 – WP/05 (WBA, Nepal, Philippines, Sri Lanka and IFALPA)
2/7	Review performance measurement indicators/metrics presented in WP/06 (AP-WHM/WG/2)	Australia, USA, ACI, WBA	September 2020	Completed	AP-WHM WG/3 – WP/08 (WBA, Australia, Bangladesh, India, Thailand and ACI)
3/1	Draft a template on State's action plan for establishment and implementation of WHMP	WBA, Australia, IFALPA, ACI, Thailand	December 2021	Completed	AP-WHM WG/4 – WP/03

	<b>ACTION ITEM/PLANNED ACTIVITIES</b>	<b>RESPONSIBLE PARTY</b>	<b>TIME FRAME</b>	<b>STATUS</b>	<b>REMARKS</b>
3/2	IBIS Webinar/Workshop (Tentative) in conjunction with AP-WHM/WG Meeting (as summary update on IBIS)	ICAO WHM Expert Group Members	In conjunction with AP-WHM/WG/5		Update on IBIS Manual provided by Mr. John Weller, US FAA
4/1	Presentation/WP by Australia on planning consideration in safeguarding framework in the vicinity of aerodromes	Australia	AP-WHM/WG/5 AP-WHM/WG/6		
4/2	Summary presentation on assistance provided to States	Secretariat	AP-WHM/WG/5 AP-WHM/WG/6		
AP-WHM/WG/5, 3 - 5 May 2023					
5/1	Response to WHM questionnaire circulated by WBA	Participants of AP-WHM/WG/5 (CAAs and Service Providers)	By July 2023		
5/2	Present WP based on analysis of the responses to WBA's WHM questionnaire	WBA	AP-WHM/WG/6		
5/3	Sharing State's/aerodrome operator's experience in managing WHM issues (IP)	Thailand (CAAT in coordination with Aerodrome Operators/other stakeholders)  India/Goa Airport	AP-WHM/WG/6		
5/4	State's Action Plan for Establishment and Implementation of the WHMP – State's progress update	India Pakistan	AP-WHM/WG/6		
5/5	Develop ICAO APAC WHM Go-Team Mission Programme (Hybrid)	ACI (Lead), Australia/AAWHG, WBA, India, Thailand	Sept./Dec. 2023		

Dear Participants of the AP-WHM/WG/5 meeting. There is no right or wrong answer for these questions but urge you to provide your views to the best of your ability.

**WHM QUESTIONNAIRE**

1. What is wildlife hazard management?
2. What are the primary objectives of wildlife hazard management?
3. What are the different types of wildlife hazards that airports commonly face?
4. What is a wildlife hazard assessment?
5. What are some of the techniques used in wildlife hazard management?
6. What is the role of an airport wildlife biologist in wildlife hazard management?
7. What are some of the challenges associated with wildlife hazard management at airports?
8. What are the consequences of not managing wildlife hazards at airports?
9. How can technology be used in wildlife hazard management?
10. What are some effective practices for wildlife hazard management at airports?

## **ICAO Asia-Pacific Wildlife Hazard Management Go-Team Methodology**

### **1. Purpose**

This document provides a step-by-step methodology for ICAO, States, Industry Partners and International Organizations to plan, execute and follow up on “Go-Team” missions to States in need of technical assistance in the area of Wildlife Hazard Management (WHM), in particular in the establishment of a National WHM Committee and a National WHM Programme.

### **2. What is an “WHM Go-Team”?**

A WHM Go-Team is a team of voluntary WHM experts from States, Industry Partners and International Organizations formed to provide technical assistance in WHM to a State, hereinafter referred to as the “Host State”, in need of such assistance in particular in the establishment of a National WHM Committee and a National WHM Programme. The key activity of the team is a mission to the Host State, during which detailed discussions and coaching can be conducted in a face-to-face setting.

### **3. Outline of Methodology of Go Team**

This methodology recommends the following steps to provide technical assistance Go-Team missions to States in WHM:

- Planning of mission;
- Coordination;
- Execution; and
- Follow Up.

These steps are described in the following.

### **4. Planning of Mission**

#### *4.1 Identify Needs of States*

Identify the States that need technical assistance in WHM and in what particular areas that needs are required, for example, the establishment of National WHM Committee or a National WHM Programme. Prioritize States and their needs based on safety risks these deficiencies pose and levels of resources available locally.

This may be done based on ICAO USOAP CMA results, ICAO regional surveys on WHM, the existence of significant safety concerns, and through consultation with the Host State.

#### *4.2 Agreement with States concerned*

ICAO should then seek agreement with the Host State that they need technical assistance in WHM in the form of a Go-Team mission. This is usually the case when WHM issues that the Host State encounters cannot be easily resolved via telecommunications means and that in-person discussions and coaching are urgently required.

#### *4.3 Team Formation*

States of Asia-Pacific and other ICAO regions, Industry Partners and International Organizations such as ICAO and COSCAPs, ACI, WBA, FAA and EASA may be invited to voluntarily join the mission.

#### 4.4 Scheduling

Unless otherwise agreed by all parties, the mission should take no more than a week.

ICAO should coordinate with the Host State, and volunteering States and International Organizations to agree on the dates of the mission.

#### 4.5 Cost Reimbursement

Go-Teams are not-for-profit missions. Participation shall be voluntary. Members of the Go-Team and their employers shall not be remunerated for their services. The costs of the mission shall either be fully reimbursed by the Host State or a third-party sponsor willing to promote WHM. An estimate of costs should be presented to the Host State or the sponsor to seek their agreement before any travel bookings are made. The seating class of air travel with consideration of flight durations should also be agreed upon beforehand.

Partners participating in the mission should book their airline tickets and the costs reimbursed by the Host State via an invoice issued by ICAO consolidating all requests for reimbursement.

The Host State should arrange, book and pay for the hotel accommodation, meals and local transport for Go-Team members while they are on-site.

#### 4.6 Technical Analysis of Needs Before Mission

At least four weeks before the mission:

- The Host State should provide relevant documents such as aerodrome manual and, if existent, national WHM programme, regulations and guidance materials as well, to all Go-Team members for review via ICAO; and
- ICAO should provide to Go-Team members relevant results of USOAP CMA activities and surveys relevant to WHM.

Two weeks before the mission ICAO should organize a briefing session with the Go-Team to discuss the logistics and workplan for the mission.

#### 4.7 Coordination with APEX and COSCAP

Go-Team missions should be as much as possible coordinated with ACI's APEX in Safety peer review assessments and COSCAP technical assistance missions to avoid duplication of efforts, schedule conflicts and optimize the use of resources.

#### 4.8 MOU with Host State

ICAO and the Host State should agree on the dates and purpose of the mission, costs recovery and responsibilities of all parties.

### **5. Execution of Mission**

Once onsite the Go-Team should meet with the Host State and seek to:

- Better understand the issues identified before the mission, any other issues not discovered before the mission, and challenges met in dealing with these by reviewing documents and discussing with the Host State;
- Share experience and best practices in dealing with similar issues in other States;

- Share and explain documents, such as, Asia-Pacific regional guidance materials in WHM [e-documents](#) (under the AGA tab) available on the ICAO APAC website and other global guidance materials; and
- Suggest relevant training materials and courses available.

The Go-Team may split into subgroups working concurrently such as one for wildlife hazard control in the airfield and another for document review in the office to enhance work efficiency.

During discussions the Go-Team should seek agreement with the Host State on recommended actions aimed at enhancing WHM and a roadmap to accomplish these.

A brief draft report should be presented to the Host State at the end of the mission and feedback should be sought.

#### **6. Confidentiality**

Unless expressly agreed by the Host State, members of the Go-Team mission shall not reveal information received and recommendations made to third parties.

#### **7. Post Mission Follow Up**

A final report focusing on the action items and a roadmap to achieve these, aimed at achieving the objectives of the mission, should be delivered to the Host State within two months after the mission.

The Host State should review the recommended action items and roadmap, make feedback on any potential challenges, and in consultation with the Go-Team make adjustments, and commit itself to the implementation of the roadmap.

ICAO should seek to follow up with the Host State regularly after the mission, with inputs from members of the Go-Team, if necessary, at least in the first two years.

-End -

State	ICAO Region	Focal Point	Position	Email	Others to include in copy
Afghanistan	APAC				
Australia	APAC	Terry O'Bree	Manager Safety Analysis and Research	Terry.O'Bree@atsb.gov.au;	ATSBInternationalReporting@atsb.gov.au; International@atsb.gov.au; Stuart.Godley@atsb.gov.au
Bhutan	APAC	Karma Dorji	Aerodrome Officer	<a href="mailto:kdorji@bcaa.gov.bt">kdorji@bcaa.gov.bt</a>	<a href="mailto:kinleyw@bcaa.gov.bt">kinleyw@bcaa.gov.bt</a> ; <a href="mailto:swangdi@bcaa.gov.bt">swangdi@bcaa.gov.bt</a> ; <a href="mailto:ptshering@bcaa.gov.bt">ptshering@bcaa.gov.bt</a>
Brunei Darussalam	APAC				
Cambodia	APAC	Kao Sitheth Nea Lykeang	Deputy Director of AGA Department Chief of Bureau of AGA Department	<a href="mailto:ksitheth@gmail.com">ksitheth@gmail.com</a> <a href="mailto:nealykeang.kh@gmail.com">nealykeang.kh@gmail.com</a>	<a href="mailto:ssca-int@ssca.gov.kh">ssca-int@ssca.gov.kh</a>
China	APAC				
Cook Islands	APAC				
Democratic People's Republic of Korea	APAC				
East Timor	APAC				
Fiji	APAC	Mosese Ratucicivi	Aerodrome Inspector - Wildlife	<a href="mailto:mosese.ratucicivi@caaf.org.fj">mosese.ratucicivi@caaf.org.fj</a>	cgs@caaf.org.fj; gsd.aa@caaf.org.fj
Hong Kong, China	APAC	Luke LI	Safety Officer (Airport)	<a href="mailto:lmli@cad.gov.hk">lmli@cad.gov.hk</a>	pmng@cad.gov.hk
India	APAC	Payal Agarwal	Assistant Director Air Safety	<a href="mailto:payal.dgca@nic.in">payal.dgca@nic.in</a>	maneesh.dgca@nic.in; sanit.dgca@nic.in; adubey.dgca@gov.in; vasanthakohila.dgca@gov.in
Indonesia	APAC	Ade Trisetyo	Aerodrome Inspector	<a href="mailto:ade_trisetyo@dephub.go.id">ade_trisetyo@dephub.go.id</a>	adeth_rossi@yahoo.com; deryindriani@yahoo.com
Japan	APAC	HAYASHIDA Futoshi	Chief Coordinator of Airport Safety Information	<a href="mailto:hayashida-f117f@mlit.go.jp">hayashida-f117f@mlit.go.jp</a>	yokono-h2dy@mlit.go.jp
Kiribati	APAC				
Lao People's Democratic Republic	APAC	Malaythong Phimmasone	Deputy Director of Aerodrome Safety and Standards Division	<a href="mailto:thong.dca@gmail.com">thong.dca@gmail.com</a>	<a href="mailto:vanthongmnm@gmail.com">vanthongmnm@gmail.com</a>
Malaysia	APAC				
Maldives	APAC				
Marshall Islands	APAC				
Micronesia (Federated States of)	APAC				
Mongolia	APAC	Munkhbold Ganbold	Head of Aerodrome and Air Navigation Oversight Division	<a href="mailto:munkhbold.g@mcaa.gov.mn">munkhbold.g@mcaa.gov.mn</a>	batkhurel.a@mcaa.gov.mn
Myanmar	APAC	Technical Library Aerodrome Standards and Safety	Technical Library Aerodrome Standards and Safety	<a href="mailto:library.ksoe@gmail.com">library.ksoe@gmail.com</a>	
Nauru	APAC				
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ICAO

Fifth Meeting of the Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM/WG/5)  
Bangkok, Thailand, 3 to 5 May 2023

**List of Experts**

**Asia/Pacific Wildlife Hazard Management Working Group (AP-WHM WG)**

**[As of 20 May 2021 5 May 2023]**

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