

**58th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

*Dhaka, Bangladesh
15 to 19 October 2023*

AGENDA ITEM 9: UPDATES

**REGIONAL COOPERATION MECHANISMS TASK FORCE –
PROGRESS REPORT**

(Presented by RCM Task Force)

SUMMARY

This paper provides an update of the work of the Regional Coordination Mechanisms Task Force (RCM TF). The Conference is invited to note:

- a) the progress made by the RCM TF in its work in strengthening and evolving existing regional mechanisms for regional cooperation, towards capability and capacity building and technical assistance in the Asia Pacific region;
- b) the challenges of the region and training needs as identified in the Needs Survey conducted in June 2023;
- c) the progress made in the examination of the feasibility of an Asia Pacific Civil Aviation Commission (APCAC);
- d)

REGIONAL COOPERATION MECHANISMS TASK FORCE – PROGRESS REPORT

1. INTRODUCTION

1.1 The 54th Asia Pacific Director General of Civil Aviation Conference (DGCA/54) in Ulaanbaatar, Mongolia, in August 2017 established a task force to focus on strengthening and evolving existing regional mechanisms for regional cooperation, towards capability and capacity building and technical assistance. Please see DGCA/54 Action item 54/25 at **Annex A**.

1.2 The Regional Cooperation Mechanisms Task Force (RCM TF) was established in May 2018 with the following Terms of Reference (TORs):

- a) Identify common and/or evolving needs of States/Administrations or a group of States/Administrations in the APAC region for capability and/or capacity development;
- b) Identify and enhance common mechanisms for regional co-operation to prevent overlaps and duplication;
- c) Identify and enhance mechanisms for funding of technical assistance;
- d) Propose recommendations for the approach and roadmap to strengthen existing regional mechanisms for regional cooperation towards capability and capacity building, and technical assistance; and
- e) Identify opportunities to improve and streamline the communication of work and outcomes of various ICAO regional working groups and taskforce.

1.3 The RCM TF currently comprises 15 States/Administrations, namely Australia, Bangladesh, People's Republic of China, Fiji, Hong Kong China, Japan, Malaysia, Nepal, New Zealand, Pakistan, Republic of Korea, Singapore, Sri Lanka, Thailand, and the United States of America, with ICAO Asia Pacific Regional Office (APAC RO) providing secretarial support.

2. UPDATES ON THE RCM TF IMPLEMENTATION ROADMAP

2.1 The RCM TF has developed an implementation roadmap. Since the last update, good progress has been made in respective areas under the implementation roadmap. Please see status of implementation in **Annex B**. In particular, the RCM TF updated the survey to identify common and evolving needs and developed a framework for training academies in the region to cooperate in the provision of training in key areas. The RCM TF also noted the deployment of the Chief Technical Advisor of the Cooperative Development of Operational Safety and Continuing Airworthiness Programme South East Asia, and the Liaison Officer for the Pacific Small Islands Developing States (PSIDS).

3. FINDINGS OF SURVEY TO IDENTIFY COMMON AND EVOLVING NEEDS

3.1 The survey to identify common and evolving needs ("needs survey") was conducted from June to July 2023 and covered six areas: Aviation Safety, Air Navigation Services (ANS), Aviation Security, Facilitation, Environmental Protection and Human Resource Development. Emerging from COVID-19, it was timely to understand the training needs of the region. The survey sought to identify States'/Administrations' needs in each area, the availability of existing implementation plans, the sources of support for implementation, challenges in implementation, and additional resources required to address these challenges. Twenty-seven States/Administrations ("respondents") responded to the survey, which was a very good response rate for such surveys in the region. Please refer to **Annex C** for details of the needs survey.

3.2 In both areas of aviation safety and security, CE 4 – Personnel Qualifications and Training was ranked within the top three needs. On aviation facilitation, implementation of contactless processes and national aviation plan in preparation for a public health emergency were identified as the top needs. In the area of ANS, transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System was identified as the top need. In the area of human resource development, attraction / retention of key aviation personnel was identified as the top need. On environmental protection, technical understanding and policy options and considerations pertaining to sustainable aviation fuels (SAF) were identified as top needs.

3.3 When respondents were asked whether they had implementation plans to address their identified need(s), most respondents indicated that such plans were available. The areas with the most implementation plan available among respondents were aviation safety and ANS, while the areas with the least implementation plans available among respondents were environmental protection and aviation facilitation.

3.4 Majority of respondents have indicated that their own State/Administration provides the existing support for their implementation plans. This is followed by ICAO APAC RO and other ICAO regional cooperation mechanisms.

3.5 When respondents were asked on the challenges faced during implementation, resources and expertise, and the lack of trained personnel or training in the area were the options with the highest responses.

3.6 On the support required to address challenges faced by respondents, technical expertise and support was consistently highlighted across all six areas. This reflects the continued need for training assistance in this region. The RCM TF is working on framework to enhance regional training coordination. Please see details in the Discussion Paper presented by the RCM TF on a proposed regional training cooperation framework.

4. EXAMINATION OF THE FEASIBILITY OF AN ASIA PACIFIC CIVIL AVIATION COMMISSION (APCAC)

Methodology

4.1 The examination of the feasibility of an APCAC (“feasibility study”) consists of three parts – i) information gathering on a civil aviation commission, ii) identifying the problem and opportunities, and iii) assessment of feasibility of an APCAC. A report will be prepared for consideration by the DGCA upon conclusion of all three parts.

4.1.1 Part I examines the Civil Aviation Commissions (CACs) which are currently in place. It looks at their objectives, responsibilities, organizational structures including CACs’ relationship with ICAO, funding, and activities. It considers the pre-conditions and operating assumptions that would inform the feasibility of an APCAC.

4.1.2 Part II builds on the work of Part I and identifies current issues and opportunities in the APAC region regarding civil aviation regional coordination across the region. It aims to seek agreement on these issues, and on the objectives of any proposed CAC.

4.1.3 Part III assesses the extent to which a CAC will address the issues and opportunities agreed by States/Administration, and the benefits this would have. It assesses the challenges and costs associated with a CAC, and the different options for how such challenges and costs may be reduced. It compares the benefits and costs of a CAC against alternate arrangements for improving regional cooperation, coordination issues and representation internationally.

Insights from Part I of the Feasibility Study

- Objectives and activities of existing CACs,
- Relationships of CACs with ICAO and other organizations,
- Legal and funding mechanisms,
- Operating assumptions that must be considered and decided on before a CAC can be established.

Insights from Part II of the Feasibility Study

- Objectives for the region (description of the problem we are seeking to fix),
- Spectrum of options for addressing the problem,
- Pre-conditions associated with each option, i.e. operating principles that states must be prepared to accept for each option

Spectrum of Options and Pre-conditions on the formation of an APCAC

4.2 Noting the insights from Parts I and II, the RCM TF is putting forth a spectrum of options which would inform the next steps upon the conclusion of the feasibility study. Each of these options would be accompanied by associated pre-conditions, which must be fulfilled prior to exercising the options. They are:

4.2.1 Maintaining the status quo. This region will continue to operate as it currently does and would not make any changes to the existing framework. This option is clearly not tenable given the challenges faced by the region.

4.2.2 Strengthening existing mechanisms. There are significant opportunities to enhance existing mechanisms, to enable them to address the issues emerging from the challenges and opportunities faced by the region. States/ Administrations must:

a) [State pre-conditions here]

4.2.3 Developing new mechanisms. New mechanisms can be developed that stands alongside existing mechanisms. Such mechanisms may include an APCAC. States / Administrations must:

a) [State pre-conditions here]

5. ACTION BY THE CONFERENCE

5.1 The Conference is invited to note:

- a) the progress made by the RCM TF in its work in strengthening and evolving existing regional mechanisms for regional cooperation, towards capability and capacity building and technical assistance in the Asia Pacific region;
- b) the challenges of the region and training needs as identified in the Needs Survey conducted in June 2023;
- c) the progress made in the examination of the feasibility of an Asia Pacific Civil Aviation Commission (APCAC);
- d)

Action Item 54/25 of the DGCA/54

Agenda Item 9: Other Business		
DP/9c/3	Action Item 54/25	<p>Asia Pacific Civil Aviation Commission (APCAC) Feasibility Study – Progress Report</p> <p>Noting that APCAC Taskforce has determined that there was insufficient basis to establish an Asia Pacific Civil Aviation Commission (APCAC), the Conference:</p> <ul style="list-style-type: none"> a) Agreed to conclude the APCAC feasibility study and establish a new Taskforce to focus exclusively on strengthening and evolving existing regional mechanism for regional cooperation, towards capability and capacity building and technical assistance; and b) Encourage States/Administrations to participate in the new Taskforce.

Implementation Roadmap for the ICAO Cooperation Mechanisms Task Force (RCM TF)

S/N	Recommendation	Action Party	Status
A	Identify common and/or evolving needs of States/Administrations or a Group of States/Administrations in the APAC region for capability and/or capacity development		
	<i>Establishing Follow-ups from States' Responses to the Needs Survey</i>		
A.1	Update Needs Survey by Q1/2023.	States Lead - Singapore	Ongoing
A.2	Align COSCAPs to the region/sub-regions/States' needs.	COSCAPs, PASO and ICAO APAC RO Lead – ICAO APAC RO	Ongoing
A.3	Prioritise CAT missions, to the needs raised by States for the next 3 years.	COSCAPs, PASO, States and ICAO APAC RO Lead – ICAO APAC RO	Ongoing
A.4	Strengthening communications with COSCAPs and PASO as well as coordination among the COSCAPs	COSCAPs, PASO and ICAO APAC RO Lead – ICAO APAC RO	Ongoing
B	Identify and enhance common mechanisms for regional co-operation to prevent overlaps and duplication		
	<i>Enhancing Governance of Regional Working Groups/ Task Forces (WG/TFs)</i>		
B.1	Request three key groupings WG/TFs to review Terms of Reference (TOR), based on the latest guidance from ICAO ANC and using the suggested template (see Attachment A)	APANPIRG, RASG, RASCF and ICAO APAC RO Lead – ICAO APAC RO	Completed by RASG-APAC and APANPIRG
	<i>Enhancing regional cooperation in training</i>		
B.2	Develop framework for training academies in the region to cooperate in the provision of training in key areas by Q2/2023. <ul style="list-style-type: none"> Form working group to look into it (2/3 states + RO) Leverage ICAO TRAINAIR plus programme 	States, Industry and ICAO APAC RO Lead – Singapore, U.S. and Republic of Korea	Ongoing
C	Identify and enhance mechanisms for funding of technical assistance		
	<i>Consolidating and Tapping on Assistance Mechanisms of ICAO and Other Stakeholders</i>		
C.1	Update list of available technical assistance resources and mechanisms that could address the needs of the APAC region, by Q1/2023. <ul style="list-style-type: none"> COSCAPs, PASO, Activities under new ICAO Implementation Support Policy Individual assistance by States and International Organisations Non-ICAO mechanisms 	ICAO APAC RO	Ongoing
C.2	Explore strategies to increase and enhance high level industry participation at ICAO forums.	States, Industry and ICAO APAC RO	Completed (high level industry panels)

S/N	Recommendation	Action Party	Status
	<ul style="list-style-type: none"> High level industry panels introduced at APAC DGCA Conference (completed) 	Lead – U.S.	
D	Propose recommendations for the approach and roadmap to strengthen existing regional mechanism for regional cooperation towards capability and capacity building, and technical assistance		
D.1	Examine the feasibility of an Asia Pacific Civil Aviation Commission	RCM TF	Ongoing
E	Identify opportunities to improve and streamline the communication of work and outcomes of various ICAO regional working groups and taskforce		
	<i>Establishing Measures to Strengthen Communication Between ICAO and States and Strengthen Storing Capabilities</i>		
E.1	Streamline State Letters (SL) for clarity and conciseness.	ICAO APAC RO	Ongoing
E.2	Establish clear and concise communication with all stakeholders. <ul style="list-style-type: none"> Send out finalised meeting reports with actions required in one single communication with necessary follow up actions by States/Administrations shown prominently in the meeting reports. Adopt suggested templates for reports and list of follow up template for all meetings (APANPIRG, RASG, RASCF, DGCA Conf etc), tweak where applicable/ 	APANPIRG, RASG, RASCF and ICAO APAC RO Lead – ICAO APAC RO	Ongoing
E.3	Create and maintain a consolidated reference list of focal points across all working groups by Q1/2023, and States to provide the POCs and to update ICAO APAC RO if there are changes.	States, Industry, Regional Groups and ICAO APAC RO Lead – ICAO APAC RO	Ongoing
E.4	Survey to get States/Industry's feedback on existing communication channels on improvements and new ideas to enhance communication.	States, Industry Lead – New Zealand	Ongoing

Report of Survey Findings on Common and Evolving Needs of the Asia Pacific Region by the Regional Cooperation Mechanism Task Force (RCM TF)

1. INTRODUCTION

1.1 The Regional Cooperation Mechanism Task Force (RCMTF) conducted a Needs Survey with to gain an understanding of the common and/or evolving needs in the civil aviation sector of the region, especially in the post-pandemic period. The survey would help the RCM Task Force to identify potential implementation support areas in the Asia Pacific region. Twenty-seven (27) States/Administrations (“respondents”) responded to the survey: -

Table 1: States / Administrations who responded to the survey.

Sub-region	North Asia	South Asia	Southeast Asia	Pacific
States / Administrations	China	Bangladesh	Cambodia	Australia
	Hong Kong, China	Bhutan	Indonesia	Cook Islands
	Japan	Maldives	Malaysia	Fiji
	Macao, China	Nepal	Myanmar	New Zealand
	Mongolia	Pakistan	Philippines	Papua New Guinea
	Republic of Korea	Sri Lanka	Singapore	Samoa
			Thailand	
			Timor Leste	
			Viet Nam	
Total	7	8	11	15
Respondents	6	6	9	6

1.2 A similar survey had been conducted in 2019, with results presented at DGCA/56. This survey was conducted to reflect the changes in needs among States / Administrations arising from the COVID-19 pandemic. It allows the ICAO Asia Pacific Regional Office (APAC RO) and the RCM TF to better support States / Administrations in delivering regional priorities.

2. BACKGROUND

2.1 The survey covered six general areas: (1) Aviation Safety, (2) Aviation Security, (3) Aviation Facilitation, (4) Air Navigation Services, (5) Human Resource Development and (6) Environmental Protection. A total of 52 needs, including all the ICAO USOAP and USAP critical elements (CEs) were listed to facilitate States/Administrations in their responses to the survey, with options for specific additional needs to be added outside the list. There are three sections to the survey for States/Administrations to indicate: (i) their needs in each of the areas; (ii) the availability of existing plans and support to address the needs, (iii) the challenges faced in implementation and the type of support required to address these challenges, as well as any other comments. In addition, there was a question on States’ / Administrations’ top three aviation training areas.

2.2 Details of States’/Administrations’ responses to the survey for the list of needs are tabulated at Annex A.

3. SURVEY FINDINGS

Overview

3.1 A summary of the top needs in each area is shown in Table 2. For each area, we have

asked respondents to rank their top three needs. For this summary, we have consolidated the response by counting the number of responses regardless of rank (i.e. the number of respondents reflect the sum of 1st, 2nd, and 3rd needs for States / Administrations).

Table 2: Summary of top needs for each of the six areas.

S/N	List of Needs	Respondents
1	<u>Aviation Safety</u>	
A4	CE 4 – Technical Personnel Qualification and Training	15
A13	Fostering a strong and positive safety culture in the aviation sector	11
A9	Implementation of an effective State Safety Programme (SSP)	8
A8	Resolution of Safety Issues	8
2	<u>Aviation Security</u>	
B9	Identification of cybersecurity threats and formulation of mitigation measures	14
B7	CE 7 – Quality Control Obligations	10
B4	CE 4 – Personnel Qualifications and Training	9
3	<u>Aviation Facilitation</u>	
C5	Implementation of contactless processes for smoother and safer travel experience.	15
C3	Implementation of national aviation plan in preparation for an outbreak of communicable disease posing a public health risk or public health emergency of international concern	14
4	<u>Air Navigation Services</u>	
D1	Transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System	16
D7	Inclusion of air navigation in National Development Plans and establishment of National Air Navigation Plan	11
D3	Establishment of common ground/ground telecommunication infrastructure to support Air Navigation Services (ANS) applications	9
D6	Air Traffic Flow Management/Collaborative Decision Making (CDM) implementation for high density airports	9
5	<u>Human Resource Development</u>	
E4	Attraction / Retention of Key aviation personnel	20
E1	Access to quality training	15
E5	Access to capability development through exchanges / OJTs / mentorship training	15
6	<u>Environmental Protection</u>	
F4	Technical understanding of sustainable aviation fuels (SAF), including global developments	16
F5	Policy options and considerations pertaining to sustainable aviation fuels (SAF)	15

3.2 Overall, there is a strong demand for training, with USOAP CE4 being highlighted as one of the top needs in both Aviation Safety and Aviation Security. For Aviation Safety, there is also a need to foster a strong and positive safety culture in the aviation sector, and for an effective implementation of the State Safety Programme (SSP). The need to identify cybersecurity threats and to formulate mitigation measure stood out as the top need for Aviation Security with more than 50% of responses indicating so. For ANS, AIS-ATM transition is the top need, followed by the inclusion of air navigation in National Development Plans and establishment of National Air Navigation Plan. Recovering from COVID-19, the need to attract and retain key aviation personnel has the highest response in Human Resource Development and for the entire survey, with about 73% of responses indicating this need. This is followed by the need for access to quality training and capability development. For Environmental Protection, the top two needs with more than 50% of responses each are technical understanding of SAF, and policy options and considerations pertaining to SAF.

3.3 More than 70% of respondents have indicated the availability of implementation plans in the following areas - Aviation Safety, Aviation Security, ANS and Human Resource Development. Aviation Facilitation and Environmental Protection each had slightly more than 50% of respondents indicating the availability of implementation plans. These results highlight the areas to focus on for development of implementation plans.

Table 3: Overall availability of implementation plans in six areas.

Implementation Plans	Aviation Safety	Aviation Security	Aviation Facilitation	ANS	Human Resource	Environment
Yes	23	20	15	22	20	14
No	4	7	12	5	7	13

3.4 On the sources of support for respondents' implementation plans, "Own State/Administration" received the highest number of responses, followed by ICAO APRO and other ICAO regional cooperation mechanisms. Please refer to Figure 1.

3.5 When asked on the challenges faced in implementation, the highest response was on resources and expertise, with each area garnering more than 50% of responses. This was followed by the lack of trained personnel or training in the area, funding, and the lack of market. Notably, there were no responses attributed to the lack of communication / access to ICAO. Please refer to Figure 2.

3.6 On the support required to address challenges faced, there was an overwhelming response for technical expertise and support, with 116 out of 162 responses (72%). This is followed by information sharing of best practices and advisory support. Please refer to Figure 3.

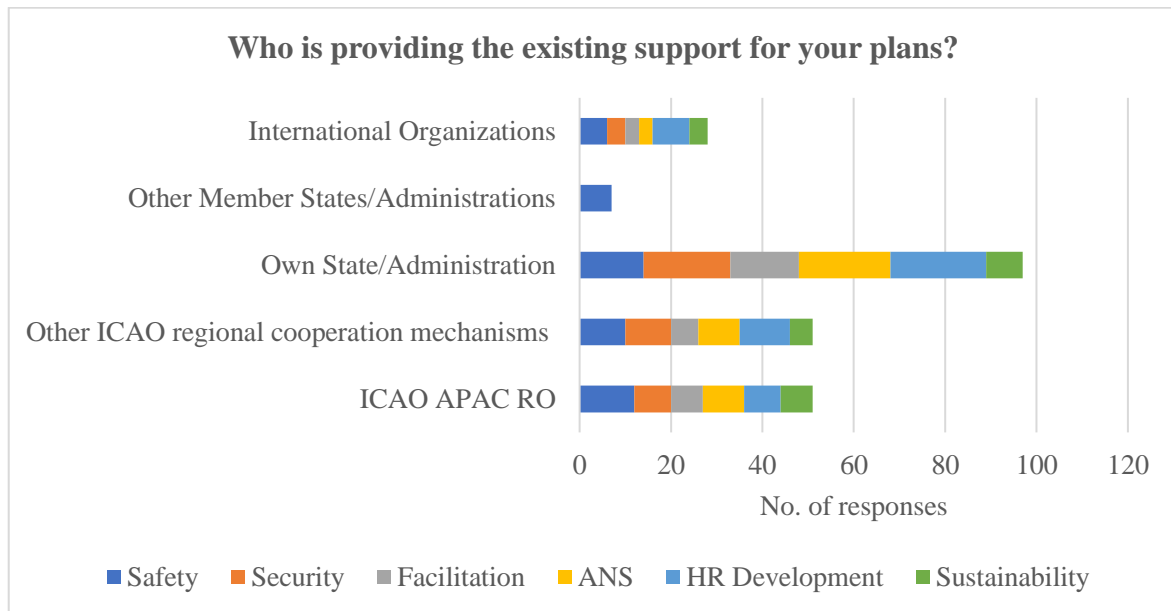


Figure 1: Sources of support for implementation plans

3.7 When asked on the top training areas, several areas were stood out. Eight respondents indicated a nil response. Out of respondents who provided a response, the top training areas included: i) inspector trainings and auditing techniques, including for safety oversight, ANS, security and flight operations (14 out of 19), ii) State Safety Programme and Safety Management System, including on fostering safety culture (4 out of 19) and iii) emerging technologies such as environment and sustainable aviation fuels (4 out of 19).

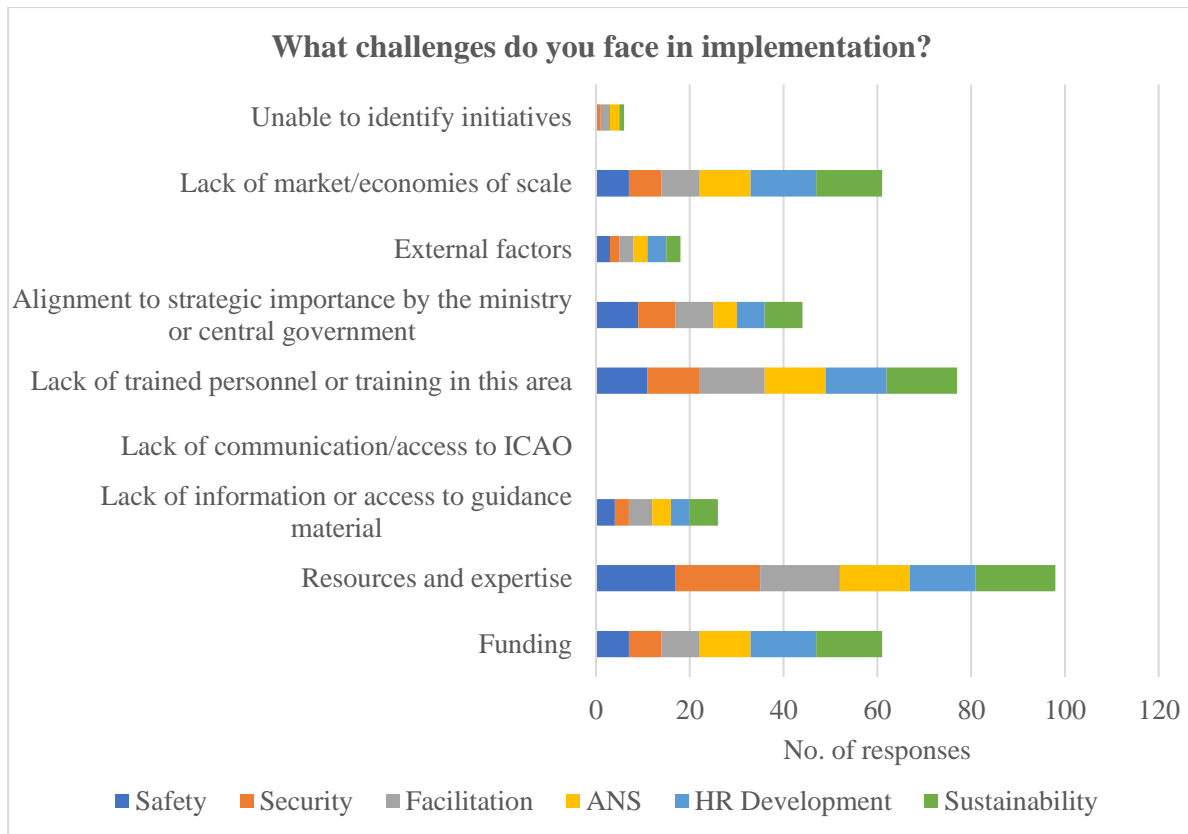


Figure 2: Challenges in implementation.

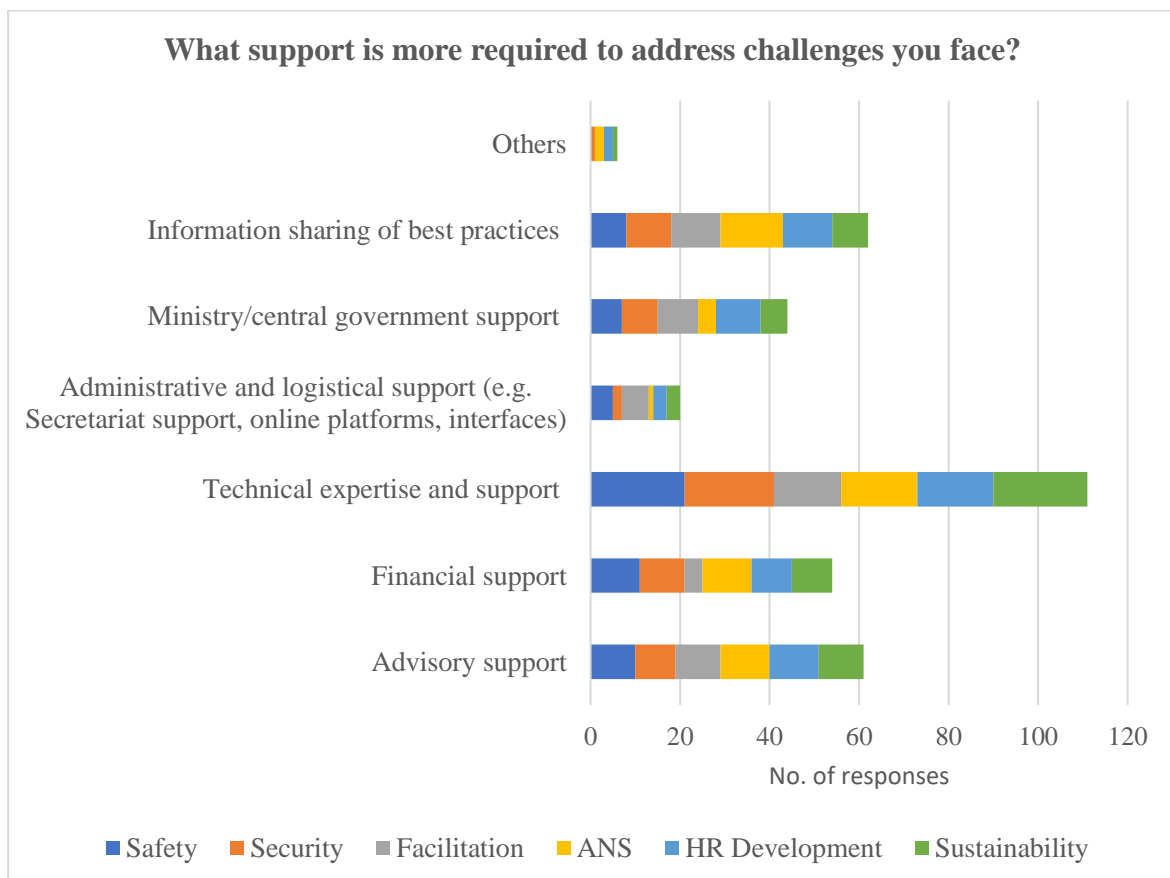


Figure 3: Support required to address challenges.

Analysis by Sub-region

3.8 Sub-regional analyses were conducted for North Asia, South Asia, Southeast Asia and Pacific to identify commonalities at the sub-regional level.

North Asia

3.9 Within North Asia, the need with the highest *weighted score*¹ was to attract / retain key aviation personnel. Like the last survey, ANS remains the area with the greatest needs, with three of the top needs featuring ANS. This could indicate the need to focus on ANS in this sub-region, coupled with the high traffic demand. The needs in Aviation Safety are towards an effective SSP, and to foster a strong and positive safety culture in the aviation sector. This is similar for Aviation Facilitation and Aviation Security. On Environment, the need highlighted is on the implementation of CORSIA SARPs.

Table 4: Top needs by weighted score in North Asia.

S/N	Area - Need	1st	2nd	3rd	Sum	Weighted Score
1	Human Resource Development – Attraction / Retention of Key aviation personnel [<i>Top vocations are: ANS inspectors (3), Aviation Safety inspectors (2) and air traffic controllers (2).</i>]	3	1	1	5	12
2	Air Navigation Services - Air Traffic Flow Management/Collaborative Decision Making (CDM) implementation for high density airports	1	2	1	4	8
3	Air Navigation Services - Performance Based Navigation (PBN) implementation	2	1	0	3	8
4	Aviation Safety - Implementation of an effective State Safety Programme (SSP)	2	0	1	3	7
5	Aviation Safety - Fostering a strong and positive safety culture in the aviation sector	2	2	0	3	7
6	Aviation Facilitation - Establishment of National Air Transport Facilitation Programme (NATFP)	2	0	1	3	7
7	Aviation Facilitation - Implementation of contactless processes for smoother and safer travel experience.	1	2	0	3	7
8	Air Navigation Services - Transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System	1	1	2	4	7
9	Human Resource Development - Training needs analysis	1	2	0	3	7
10	Environmental Protection - Implementation of CORSIA SARPs	1	2	0	3	7

3.10 Regarding the availability of implementation plans for each of the six areas, these were available for most respondents' State/Administration. Four out of six respondents had implementation plans on Aviation Security, Aviation Facilitation, Human Resource Development and Environmental Protection, while five out of six had implementation plans for Aviation Safety and ANS.

3.11 On the areas of ANS and Human Resource Development, respondents in the North Asia sub-region had indicated that their own State/Administration has been providing support. The challenges faced in implementation were resource and expertise, and lack of trained personnel. When asked what support would be required to address these challenges, information sharing of best practices had the highest weighted score for ANS, while technical expertise and support had the highest weighted

¹ To calculate the weighted score, each response of 1st priority was allocated three points, 2nd priority was allocated two points, and 3rd priority was allocated one point. The weighted score is the sum of all the points allocated.

score for the area of human resource development. Please refer to Figure 4.

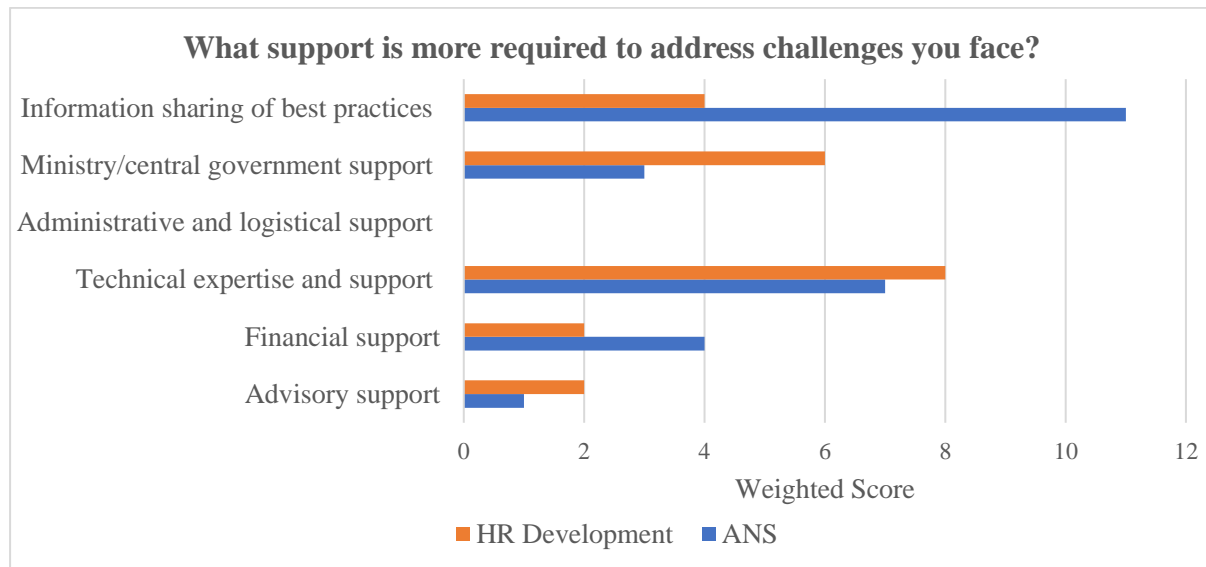


Figure 4: Support required to address top challenges in North Asia.

South Asia

3.12 Within South Asia, the need with the highest *weighted score* was for the transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System and for policy options and considerations pertaining to sustainable aviation fuels. Unlike the previous survey which saw the highest needs in ANS, this survey presented a more balanced result with emphasis on environmental protection and aviation safety. In alignment to the broad survey result, the attraction / retention of key aviation personnel remains a focus in South Asia.

Table 5: Top needs by weighted score in South Asia.

S/N	Area - Need	1st	2nd	3rd	Sum	Weighted Score
1	Air Navigation Services – Transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System	2	3	0	5	12
2	Environmental Protection - Policy options and considerations pertaining to sustainable aviation fuels (SAF)	2	3	0	5	12
3	Human Resource Development – Attraction / Retention of Key aviation personnel [<i>Top vocations are: ANS inspectors (2), Aviation Safety inspectors (2)</i>]	2	2	0	4	10
4	Environmental Protection t - Technical understanding of sustainable aviation fuels (SAF), including global developments	2	1	2	5	10
5	Aviation Safety - CE 8 – Resolution of Safety Issues	1	3	0	4	9
6	Aviation Safety - Fostering a strong and positive safety culture in the aviation sector	2	0	3	5	9
7	Aviation Security - CE 4 – Personnel Qualifications and Training	2	1	1	4	9
8	Aviation Facilitation - Implementation of contactless processes for smoother and safer travel experience.	2	1	1	4	9

3.13 Regarding the availability of implementation plans for each of the six areas, these were available for most respondents' State/Administration. All six respondents indicated having an implementation plan on aviation safety; five out of six indicated availability of ANS and Human Resource Development plans; and three out of six indicated availability of aviation security, aviation facilitation, and environmental protection plans.

3.14 Respondents from South Asia have indicated that their own State/Administration has been providing the most support in implementation, followed closely by the ICAO APAC RO and other regional cooperation mechanisms. The challenges faced in implementation were resource and expertise, lack of trained personnel, funding, and lack of market or economies of scale. When asked what support would be required to address these challenges, technical expertise and support had the highest weighted score for five out of six areas, including for aviation safety and environmental protection. Please refer to Figure 5.

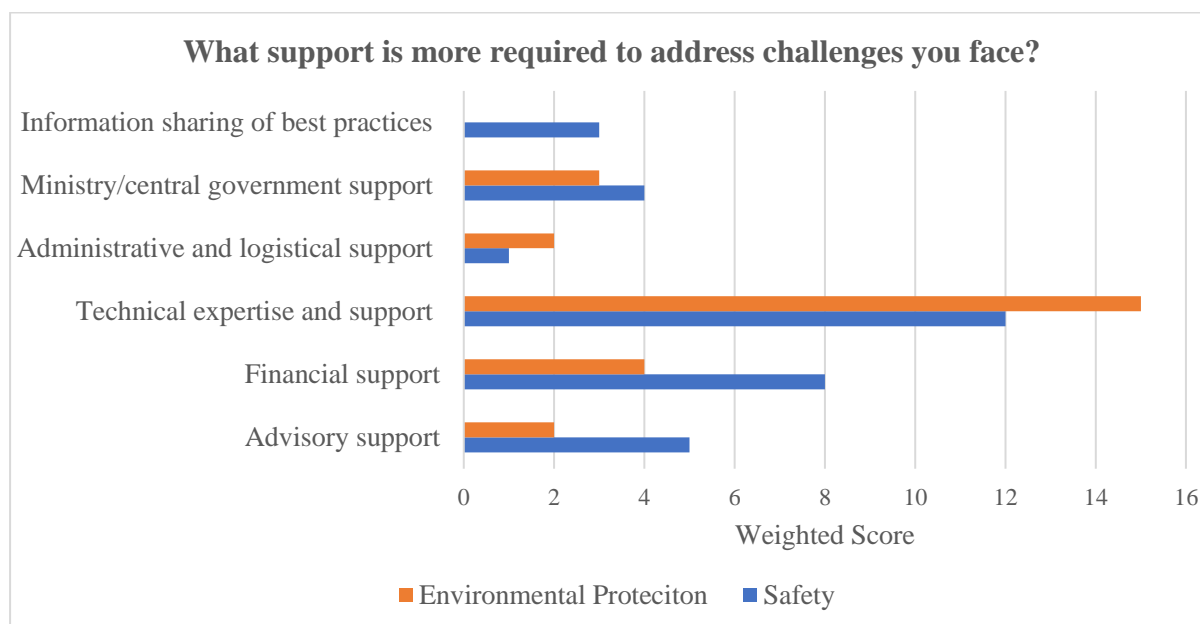


Figure 5: Support required to address top challenges in South Asia.

Southeast Asia

3.15 Within Southeast Asia, the need with the highest *weighted score* was to attract / retain key aviation personnel. Training has been identified as one of the top needs, particularly in aviation safety. Cybersecurity threats have also been indicated as an area of need in Southeast Asia. This is unlike the previous survey which highlighted ANS as the area with highest needs.

3.16 Regarding the availability of implementation plans for each of the six areas, these were available for most respondents' State/Administration. All eight respondents indicated having an implementation plan on aviation safety, ANS and human resource development; seven out of eight indicated availability of implementation plans for aviation security; and six out of eight indicated availability of implementation plans for aviation facilitation and environmental protection.

3.17 Like other sub-regions, respondents from Southeast Asia have indicated that their own State/Administration has been providing the most support in implementation, followed closely by the ICAO APAC RO and other regional cooperation mechanisms. The challenges faced in implementation were resource and expertise, lack of trained personnel, alignment to strategic importance by the ministry or central government, funding, and lack of market or economies of scale. When asked what support would be required to address these challenges, technical expertise and support had the highest weighted

score for the areas of human resource development and aviation safety Information sharing of best practices is also an area of support requested for human resource development, so is financial support for aviation safety. Please refer to Figure 6.

Table 6: Top needs by weighted score in Southeast Asia.

S/N	Area - Need	1st	2nd	3rd	Sum	Weighted Score
1	Human Resource Development – Attraction / Retention of Key aviation personnel [<i>Top vocations are Air traffic controllers (3), ANS inspectors (2), Security inspectors (2), Aviation Safety inspectors (2), Licensed aircraft engineers (2)</i>]	4	0	3	7	15
2	Aviation Safety - CE 4 – Technical Personnel Qualification and Training	2	3	0	5	12
3	Human Resource Development - Training needs analysis	2	2	1	5	11
4	Aviation Security - Identification of cybersecurity threats and formulation of mitigation measures	2	2	1	5	11

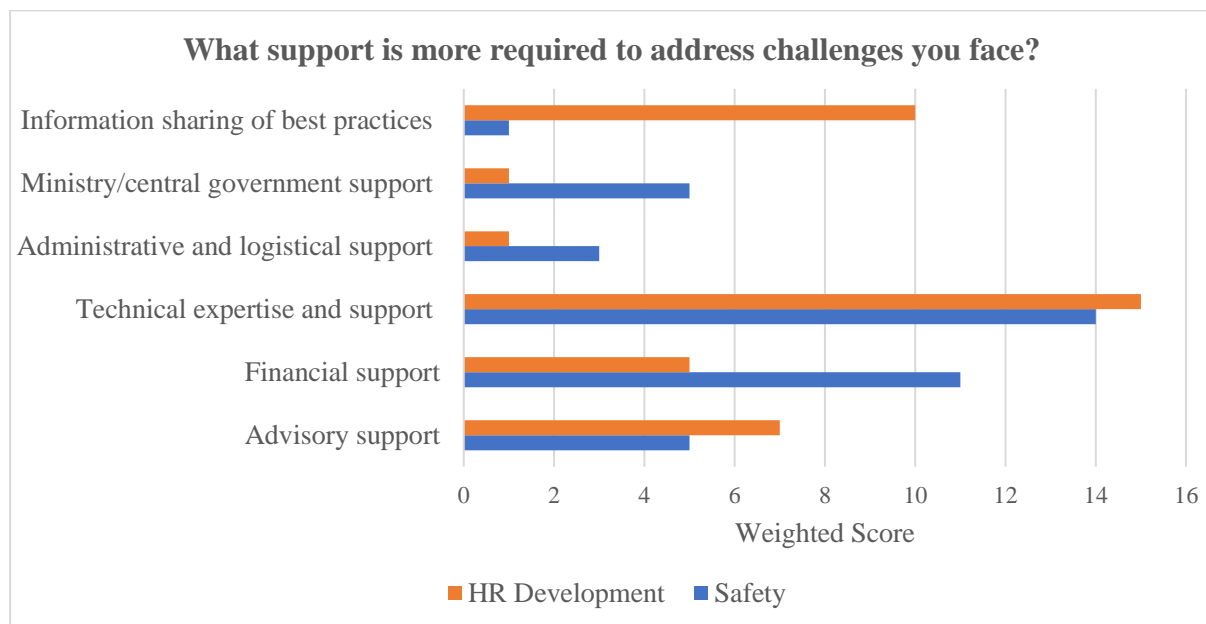


Figure 6: Support required to address top challenges in South Asia.

Pacific

3.18 Within the Pacific, the need with the highest *weighted score* was on the implementation of contactless processes for smoother and safer travel experience, access to resources through bilateral and/or multilateral arrangements including with industry partners and access to capability development through exchanges / OJTs / mentorship training. Overall, there is a continued emphasis on training and capability development, particularly in the area of aviation safety. This is similar to the previous survey done.

3.19 Looking into the responses from the Pacific Small Island Developing States (PSIDS), we note that the area with the highest needs remain the same as the overall results. However, Technical Personnel Qualification and Training under the area of aviation safety is now the second highest need, followed closely by the needs on human resource development as shown in Table 7.

3.20 Regarding the availability of implementation plans for each of the six areas, these were

lacking when compared to the other sub-regions. Focusing on the PSIDS, all respondents indicated that they did not half an implementation plan related to environmental protection, while only half the respondents indicated having a plan on aviation facilitation, air navigational services and human resource development.

Table 7: Top needs by weighted score in the Pacific.

S/N	Area - Need	1st	2nd	3rd	Sum	Weighted Score
1	Aviation Facilitation - Implementation of contactless processes for smoother and safer travel experience.	2	2	0	4	10
2	Human Resource Development - Access to resources through bilateral and/or multilateral arrangements including with industry partners	2	1	2	5	10
3	Human Resource Development - Access to capability development through exchanges / OJTs / mentorship training	2	2	0	4	10
4	Aviation Safety - CE 4 – Technical Personnel Qualification and Training	3	0	0	3	9
5	Aviation Security - Identification of cybersecurity threats and formulation of mitigation measures	2	1	1	4	9
6	Air Navigation Services - Transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System	2	1	0	3	8

3.21 Like other sub-regions, respondents from the Pacific have indicated that their own State/Administration has been providing the most support in implementation. This was followed by International Organisations, with ICAO APAC RO and other ICAO regional cooperation having the lowest number of responds. This is different from other sub-regions where ICAO mechanisms has been identified as a source of strong support in implementation.

3.22 The challenges faced in implementation were resource and expertise, funding, lack of market/economies of scale and lack of trained personnel or training in this area. Looking at responses from the PSIDS, the top challenge was similar to that of the overall results. When asked what support would be required to address these challenges, technical expertise and support had the highest weighted score overall. Unlike the results of other sub-regions, the supported required by areas were spread evenly, i.e. there were similar number of responses for each area of safety, security per option.

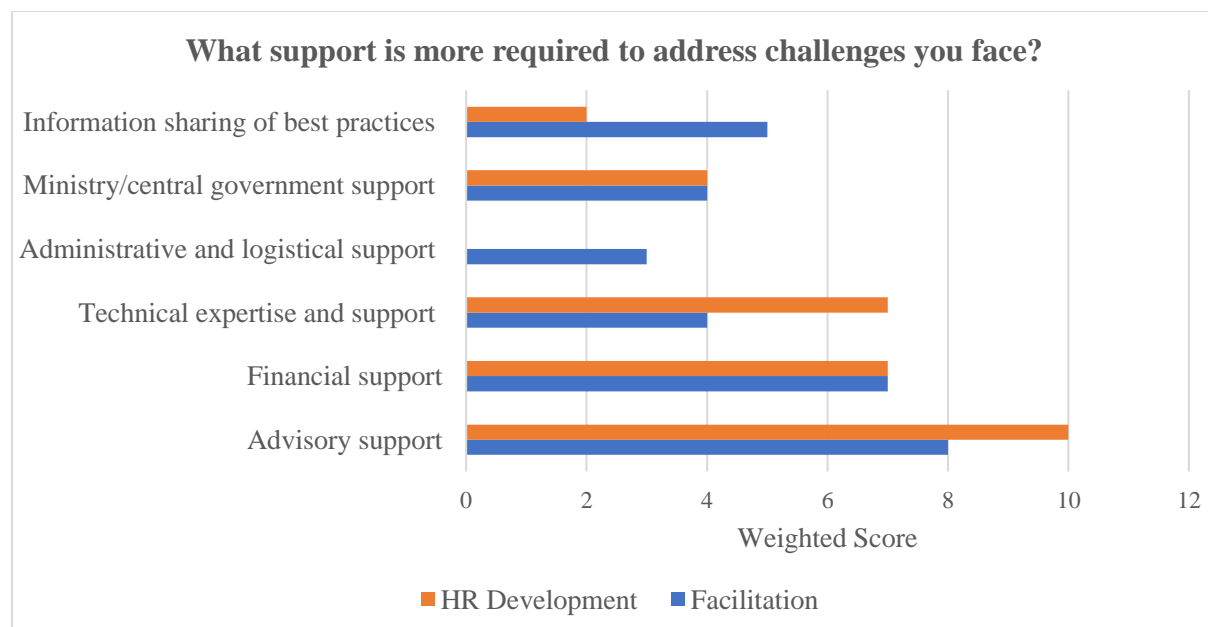


Figure 7: Support required to address top challenges in the Pacific

Full Results

a) Identify up to three aviation facilitation needs of your State/Administration and rank them accordingly (i.e. rank 1 as top priority).

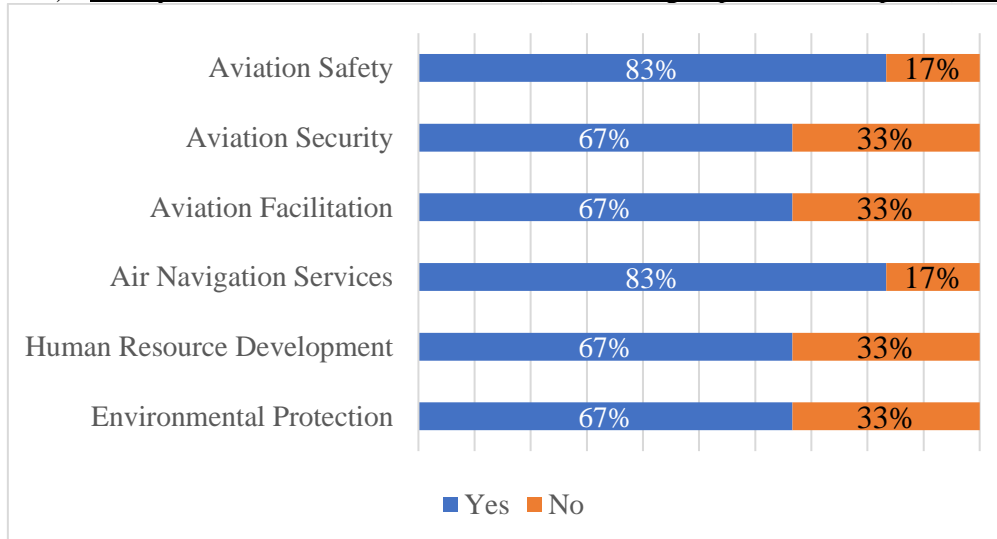
The numbers indicate responses in the following order: 1st priority, 2nd priority, 3rd priority and weighted score.

S/N	List of Needs	North Asia				South Asia				Southeast Asia				Pacific				Total			
1	<u>Aviation Safety</u>																				
A1	CE 1 – Primary Aviation Legislation	0	0	0	0	1	0	0	3	1	0	0	3	0	2	0	4	2	2	0	10
A2	CE 2 – Specific Operation Regulations	0	0	0	0	0	1	0	2	0	1	1	3	0	0	0	0	0	2	1	5
A3	CE 3 – State/Administration Civil Aviation System and Safety Oversight Functions	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1	0	2
A4	CE 4 – Technical Personnel Qualification and Training	0	1	1	3	1	1	2	7	2	3	0	12	3	0	0	9	7	5	3	34
A5	CE 5 – Technical Guidance, Tools and the Provision of Safety-critical Information, such as IT systems to assist in safety oversight and obtaining of approvals, etc.	0	0	1	1	0	0	0	0	0	0	0	0	1	0	4	7	1	0	5	8
A6	CE 6 – Licensing, Certification, Authorization and approval obligations	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
A7	CE 7 – Surveillance Obligations	0	0	0	0	0	1	0	2	0	1	1	3	0	1	0	2	0	3	2	8
A8	CE 8 – Resolution of Safety Issues	0	0	0	0	1	3	0	9	2	0	1	7	0	0	0	0	3	4	1	18
A9	Implementation of an effective State Safety Programme (SSP)	2	0	1	7	0	0	0	0	1	1	1	6	0	1	1	3	3	2	3	16
A10	Certification of all aerodromes used for international operations	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	1	0	0	3
A11	Inclusion of aviation safety in National Development Plans and Civil Aviation Master Plans, and establishment of National Aviation Safety Plan	0	1	0	2	1	0	0	3	1	0	2	5	1	0	0	3	3	1	2	13
A12	Identification/mitigation of safety risks arising from COVID-19 and the increase in intensity of operations to support air travel recovery, such as prolonged storage of aircraft, degradation of personnel proficiency, manpower shortage and degraded focus on safety management by organisations	2	0	0	6	0	0	1	1	2	0	0	6	0	0	0	0	4	0	1	13
A13	Fostering a strong and positive safety culture in the aviation sector	1	2	0	7	2	0	3	9	1	1	0	5	0	1	0	2	4	4	3	23
A14	Others, please specify:	1	0	0	3	0	0	0	0	0	0	0	0	1	0	0	3	2	0	0	6
2	<u>Aviation Security</u>																				
B1	CE 1 – Primary Aviation Security Legislation	0	0	0	0	1	1	1	6	1	0	0	3	0	1	1	3	2	2	2	12
B2	CE 2 – Aviation Security Programmes and Regulations	1	0	0	3	0	0	0	0	1	0	0	3	0	1	1	3	2	1	1	9
B3	CE 3 – State/Administration Appropriate Authority for Aviation Security and its Responsibilities	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0	2
B4	CE 4 – Personnel Qualifications and Training	0	1	0	2	2	1	1	9	1	1	1	6	0	0	0	0	4	3	2	20
B5	CE 5 – Provision of Technical Guidance, Tools and Security-Critical Information	0	0	1	1	0	0	1	1	1	0	1	4	1	0	1	4	2	0	4	10
B6	CE 6 – Certification and Approval Obligations	1	0	0	3	1	0	0	3	0	1	1	3	0	0	0	0	2	1	1	9
B7	CE 7 – Quality Control Obligations	0	1	1	3	2	1	0	8	0	1	1	3	1	0	1	4	3	4	3	20
B8	CE 8 – Resolution of Security Concerns	0	0	0	0	0	0	1	1	1	0	1	4	0	1	0	2	1	1	3	8

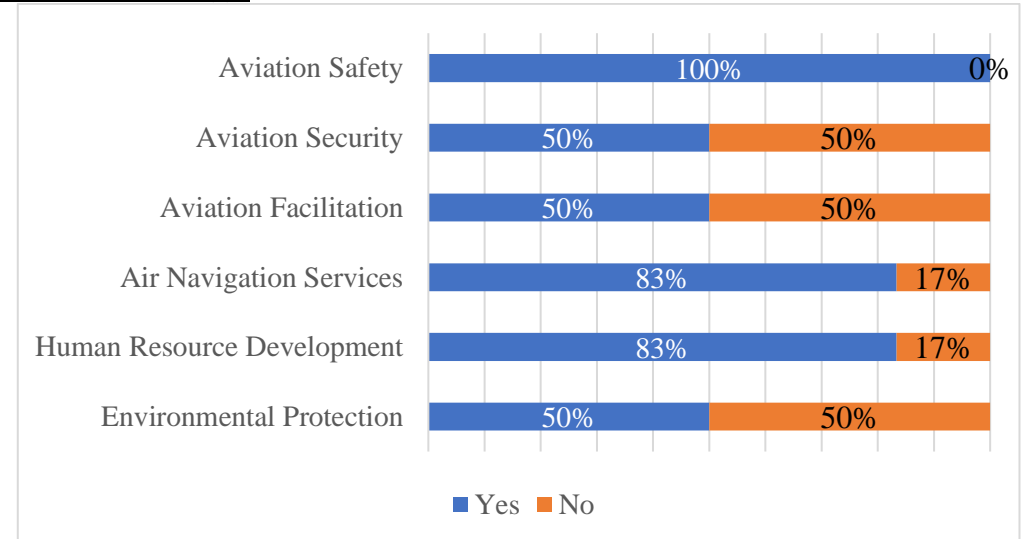
S/N	List of Needs	North Asia				South Asia				Southeast Asia				Pacific				Total			
B9	Identification of cybersecurity threats and formulation of mitigation measures	1	1	1	6	0	2	0	4	2	2	1	11	2	1	1	9	5	6	3	30
B10	Identification of threats to airport landside security and implementation of mitigation measures																				
		1	0	0	3	0	1	1	3	1	1	0	5	1	0	0	3	3	2	1	14
B11	Implementation of mitigation measures to counter insider threats	1	1	0	5	0	0	1	1	0	0	0	0	1	0	0	3	2	1	1	9
B12	Inclusion of aviation security in National Development Plans and Civil Aviation Master Plans, and establishment of a National Aviation Security Plan																				
		1	0	0	3	0	0	0	0	0	1	1	3	0	0	0	0	1	1	1	6
B13	Identification/mitigation of security risks including COVID-19 related, such as challenges in identifying and screening passengers wearing personal protective equipment (PPE), including face coverings																				
		0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1	0	2
B14	Others, please specify:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	<u>Aviation Facilitation</u>																				
C1	Establishment of National Air Transport Facilitation Programme (NATFP)	2	0	1	7	1	0	0	3	2	1	0	8	1	0	1	4	6	2	2	24
C2	Establishment to a National Air Transport Facilitation Committee and Airport Facilitation Committee for the purpose of coordinating facilitation activities within the state																				
		0	1	0	2	1	1	1	6	1	2	0	7	1	1	0	5	4	5	1	23
C3	Implementation of national aviation plan in preparation for an outbreak of communicable disease posing a public health risk or public health emergency of international concern																				
		0	1	2	4	1	1	1	6	0	0	4	4	1	0	3	6	2	2	10	20
C4	Implementation of necessary measures to make accessible to persons with disabilities all the elements of the chain of the person’s journey, from arrival at the airport to leaving the airport.																				
		1	0	0	3	0	1	2	4	2	1	0	8	0	2	0	4	3	4	3	20
C5	Implementation of contactless processes for smoother and safer travel experience.	1	2	0	7	2	1	1	9	1	1	2	7	2	2	0	10	6	6	3	33
C6	Others, please specify:	0	0	0	0	1	0	0	3	1	0	0	3	0	0	0	0	2	0	0	6
4	<u>Air Navigation Services</u>																				
D1	Transition from Aeronautical Information Service (AIS) to Aeronautical Information Management (AIM) System	1	1	2	7	2	3	0	12	1	3	0	9	2	1	0	8	6	8	2	36
D2	Performance Based Navigation (PBN) implementation	2	1	0	8	1	0	0	3	2	0	0	6	0	1	0	2	5	2	0	19
D3	Establishment of common ground/ground telecommunication infrastructure to support Air Navigation Services (ANS) applications	1	1	1	6	0	1	0	2	1	0	1	4	0	1	1	3	2	3	4	16
D4	Enhanced level of civil/military cooperation	1	0	0	3	0	0	1	1	1	0	2	5	0	0	0	0	2	0	3	9
D5	Enhanced surveillance capability including Automatic Dependent Surveillance-Broadcast (ADS-B) technology	0	1	1	3	0	1	1	3	0	0	0	0	2	0	0	6	2	2	2	12
D6	Air Traffic Flow Management/Collaborative Decision Making (CDM) implementation for high density airports	1	2	1	8	0	0	1	1	0	2	1	5	0	0	0	0	2	4	3	17
D7	Inclusion of air navigation in National Development Plans and establishment of National Air Navigation Plan	0	0	0	0	1	0	1	4	1	2	1	8	0	1	3	5	2	4	5	19
D8	Addressing deficiencies identified by APANPIRG and/or its subgroups	0	0	0	0	0	0	1	1	1	1	1	6	0	1	0	2	1	2	2	9

S/N	List of Needs	North Asia				South Asia				Southeast Asia				Pacific				Total			
D9	Identification/mitigation of safety risks for changes to the provision of air navigation services (Enhancement of Safety Risk Assessment Capability)	0	0	0	0	1	1	1	6	1	0	1	4	1	0	1	4	3	1	3	14
D10	Others, please specify:	0	0	0	0	1	0	0	3	0	0	0	0	1	0	0	3	2	0	0	6
5	<u>Human Resource Development</u>																				
E1	Access to quality training	0	1	3	5	1	2	1	8	1	2	0	7	1	1	1	6	3	7	5	28
E2	Access to resources through bilateral and/or multilateral arrangements including with industry partners	1	0	0	3	0	1	2	4	1	2	0	7	2	1	2	10	4	4	4	24
E3	Training needs analysis	1	2	0	7	3	0	0	9	2	2	1	11	0	0	1	1	6	4	2	28
E4	Attraction/Retention of key aviation personnel <i>To select the roles of such aviation personnel:</i> <ul style="list-style-type: none"> ○ Aviation safety inspectors ○ Security inspectors ○ ANS inspectors ○ Air traffic controllers ○ Airline pilots ○ Cabin crew ○ Licensed aircraft engineers 																				
		3	1	1	12	2	2	0	10	4	0	3	15	1	1	1	6	11	4	5	46
E5	Access to capability development through exchanges / OJTs / mentorship training	0	1	1	3	0	1	3	5	0	1	3	5	2	2	0	10	2	5	8	24
E6	Others, please specify:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	<u>Environmental Protection</u>																				
F1	Implementation of CORSIA SARPs	1	2	0	7	2	0	0	6	4	0	1	13	0	0	0	0	7	2	1	26
F2	Establishment of Monitoring, Reporting and Verification (MRV) processes	1	1	1	6	2	0	0	6	0	2	0	4	0	1	1	3	3	4	2	19
F3	Establishment of a State Action Plan (SAP)	1	0	0	3	2	0	1	7	0	0	2	2	3	0	1	10	7	0	4	25
F4	Technical understanding of sustainable aviation fuels (SAF), including global developments	0	1	1	3	2	1	2	10	1	3	2	11	1	1	0	5	4	7	5	31
F5	Policy options and considerations pertaining to sustainable aviation fuels (SAF)	1	0	1	4	2	3	0	12	2	1	0	8	2	2	0	10	7	6	2	35
F6	Understanding of developments pertaining to aircraft technological improvements	0	0	0	0	1	0	0	3	0	1	2	4	0	1	0	2	1	2	2	9
F7	Understanding of developments pertaining to operational improvements	0	0	1	1	1	0	2	5	1	0	0	3	0	1	2	4	2	1	5	13
F8	Others, please specify:	0	0	0	0	1	0	0	3	0	0	0	0	0	0	1	1	1	0	1	4

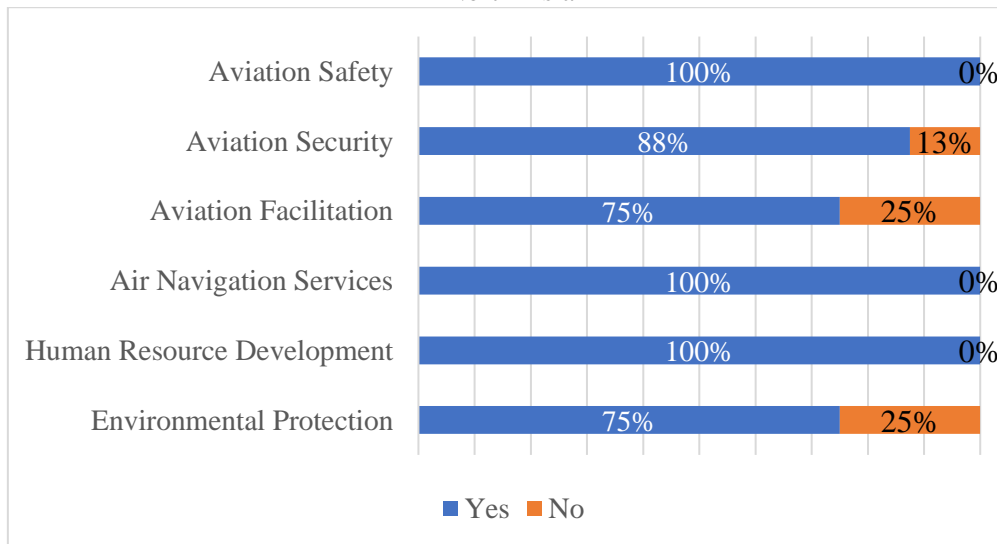
b) Does your State/Administration have (an) existing implementation plan(s) for the identified need(s)?



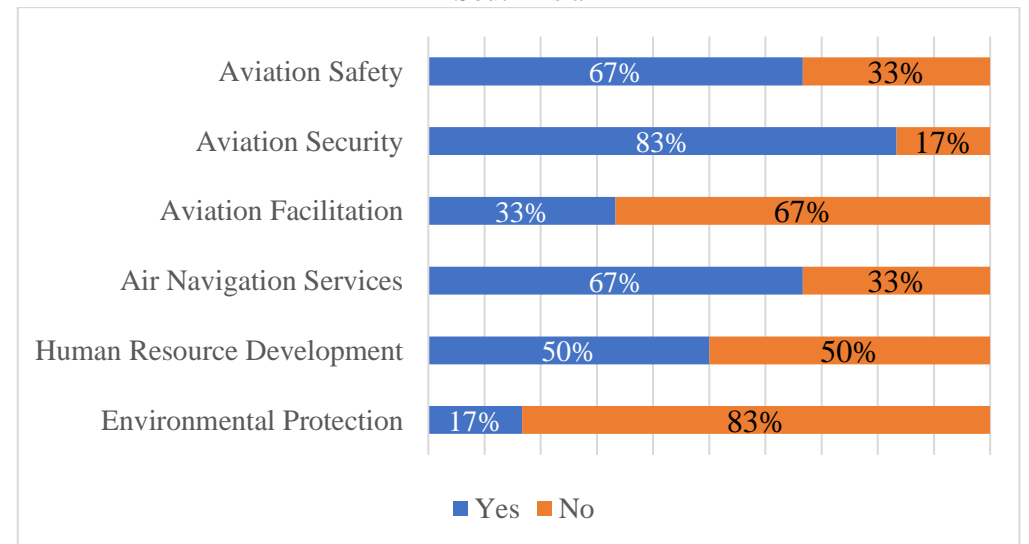
North Asia



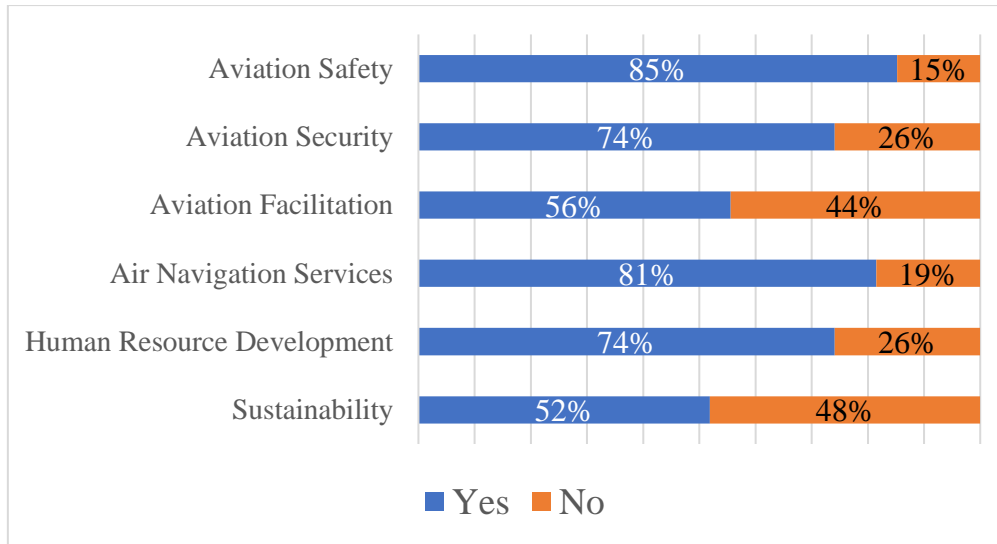
South Asia



Southeast Asia



Pacific



Overall

Areas	Yes	No
Aviation Safety	23	4
Aviation Security	20	7
Aviation Facilitation	15	12
Air Navigation Services	22	5
Human Resource Development	20	7
Environmental Protection	14	13

Areas	Who is providing the existing support for your plans? (You may select more than one option)	North Asia (out of 6 respondents)	South Asia (out of 6 respondents)	Southeast Asia (out of 9 respondents)	Pacific (out of 6 respondents)	Total (out of 27 respondents)
Aviation Safety	ICAO APAC RO	2	4	6	0	12
	Other ICAO regional cooperation mechanisms	0	4	5	1	10
	Own State/Administration	4	4	4	2	14
	Other Member States/Administrations	2	1	3	1	7
	International Organizations	0	3	2	1	6
	Others	0	0	0	0	0
Aviation Security	ICAO APAC RO	0	4	4	0	8
	Other ICAO regional cooperation mechanisms	2	4	4	0	10
	Own State/Administration	3	6	5	5	19
	Other Member States/Administrations	0	0	0	0	0
	International Organizations	0	1	2	1	4
	Others	0	0	0	0	0
Aviation Facilitation	ICAO APAC RO	0	4	3	0	7
	Other ICAO regional cooperation mechanisms	0	4	2	0	6
	Own State/Administration	3	6	4	2	15
	Other Member States/Administrations	0	0	0	0	0
	International Organizations	0	1	1	1	3
	Others	0	0	0	0	0
Air Navigation Services	ICAO APAC RO	1	3	4	1	9
	Other ICAO regional cooperation mechanisms	0	4	4	1	9
	Own State/Administration	5	5	6	4	20
	Other Member States/Administrations	0	0	0	0	0
	International Organizations	0	0	1	2	3
	Others	0	0	0	0	0

Human Resource Development	ICAO APAC RO	1	4	3	0	8
	Other ICAO regional cooperation mechanisms	0	5	5	1	11
	Own State/Administration	3	6	8	4	21
	Other Member States/Administrations	0	0	0	0	0
	International Organizations	1	4	2	1	8
	Others	0	0	0	0	0
Environmental Protection	ICAO APAC RO	1	4	2	0	7
	Other ICAO regional cooperation mechanisms	0	2	3	0	5
	Own State/Administration	2	1	5	0	8
	Other Member States/Administrations	0	0	0	0	0
	International Organizations	0	1	3	0	4
	Others	0	0	0	0	0

Areas	What challenges do you face in implementation? (You may select more than one option)	North Asia (out of 6 respondents)	South Asia (out of 6 respondents)	Southeast Asia (out of 9 respondents)	Pacific (out of 6 respondents)	Total (out of 27 respondents)
Aviation Safety	Funding	0	0	2	5	7
	Resources and expertise	2	4	5	6	17
	Lack of information or access to guidance material	1	1	1	1	4
	Lack of communication/access to ICAO	0	0	0	0	0
	Lack of trained personnel or training in this area	2	3	4	2	11
	Alignment to strategic importance by the ministry or central government	2	1	3	3	9
	External factors	0	0	1	2	3
	Lack of market/economies of scale	0	0	2	5	7
	Unable to identify initiatives	0	0	0	0	0
	Others	0	0	0	0	0
Aviation Security	Funding	0	1	2	4	7
	Resources and expertise	3	5	4	6	18
	Lack of information or access to guidance material	1	2	0	0	3
	Lack of communication/access to ICAO	0	0	0	0	0
	Lack of trained personnel or training in this area	2	3	2	4	11
	Alignment to strategic importance by the ministry or central government	1	2	3	2	8
	External factors	0	0	1	1	2
	Lack of market/economies of scale	0	1	2	4	7
	Unable to identify initiatives	0	0	1	0	1
	Others	0	0	0	0	0
Aviation Facilitation	Funding	0	3	1	4	8
	Resources and expertise	3	5	4	5	17
	Lack of information or access to guidance material	2	2	1	0	5
	Lack of communication/access to ICAO	0	0	0	0	0

	Lack of trained personnel or training in this area	2	5	4	3	14
	Alignment to strategic importance by the ministry or central government	1	0	4	3	8
	External factors	0	1	1	1	3
	Lack of market/economies of scale	0	3	1	4	8
	Unable to identify initiatives	0	1	1	0	2
	Others	0	0	0	0	0
Air Navigation Services	Funding	2	1	4	4	11
	Resources and expertise	2	4	4	5	15
	Lack of information or access to guidance material	1	2	1	0	4
	Lack of communication/access to ICAO	0	0	0	0	0
	Lack of trained personnel or training in this area	0	4	5	4	13
	Alignment to strategic importance by the ministry or central government	0	0	4	1	5
	External factors	1	1	1	0	3
	Lack of market/economies of scale	2	1	4	4	11
	Unable to identify initiatives	0	1	1	0	2
	Others	0	0	0	0	0
Human Resource Development	Funding	2	4	3	5	14
	Resources and expertise	2	3	5	4	14
	Lack of information or access to guidance material	1	1	1	1	4
	Lack of communication/access to ICAO	0	0	0	0	0
	Lack of trained personnel or training in this area	3	4	3	3	13
	Alignment to strategic importance by the ministry or central government	0	4	1	1	6
	External factors	0	2	1	1	4
	Lack of market/economies of scale	2	4	3	5	14
	Unable to identify initiatives	0	0	0	0	0
	Others	0	0	0	0	0

Environmental Protection	Funding	1	3	6	4	14
	Resources and expertise	2	4	7	4	17
	Lack of information or access to guidance material	0	0	3	3	6
	Lack of communication/access to ICAO	0	0	0	0	0
	Lack of trained personnel or training in this area	1	4	5	5	15
	Alignment to strategic importance by the ministry or central government	1	1	5	1	8
	External factors	0	1	2	0	3
	Lack of market/economies of scale	1	3	6	4	14
	Unable to identify initiatives	0	0	1	0	1
	Others	0	0	0	0	0

- e) What support is more required to address challenges you face? (You may select up to three options. Kindly rank them in order of priority (i.e. rank 1 as top priority))

The numbers indicate responses in the following order: 1st priority, 2nd priority, 3rd priority and weighted score.

List of Needs	North Asia				South Asia				Southeast Asia				Pacific				Total			
<u>Aviation Safety</u>																				
Advisory support	0	1	0	2	1	0	2	5	0	2	1	5	1	0	2	5	2	3	5	17
Financial support	0	0	0	0	2	1	0	8	3	1	0	11	3	1	0	11	9	3	0	33
Technical expertise and support	1	2	1	8	2	3	0	12	3	2	1	14	1	3	2	11	7	10	5	46
Administrative and logistical support (e.g. Secretariat support, online platforms, interfaces)	1	0	0	3	0	0	1	1	0	1	1	3	1	0	0	3	2	1	2	10
Ministry/central government support	1	0	0	3	1	0	1	4	1	0	2	5	0	1	0	2	3	2	3	16
Information sharing and of best practices	3	1	0	11	0	1	1	3	0	0	1	1	0	1	0	2	3	3	2	17
Others:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>Aviation Security</u>																				
Advisory support	0	1	0	2	1	1	1	6	0	1	1	3	1	1	1	6	2	4	3	17
Financial support	0	0	0	0	0	2	1	5	2	2	0	10	2	1	0	8	5	5	1	26
Technical expertise and support	3	1	0	11	3	2	0	13	3	1	1	12	2	3	1	13	11	8	2	51
Administrative and logistical support (e.g. Secretariat support, online platforms, interfaces)	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2
Ministry/central government support	0	0	0	0	2	0	1	7	1	0	2	5	1	0	1	4	4	0	4	16
Information sharing and of best practices	1	1	1	6	0	1	1	3	1	1	1	6	0	1	1	3	2	4	5	19
Others:	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3
<u>Aviation Facilitation</u>																				
Advisory support	0	0	0	0	0	0	3	3	2	1	1	9	2	1	0	8	4	2	4	20
Financial support	0	0	0	0	0	1	0	2	0	0	0	0	2	0	1	7	2	1	1	9
Technical expertise and support	0	2	0	4	4	1	0	14	4	2	0	16	0	2	0	4	9	7	0	41
Administrative and logistical support (e.g. Secretariat support, online platforms, interfaces)	1	0	0	3	1	1	2	7	0	0	0	0	1	0	0	3	3	1	2	13
Ministry/central government support	1	1	0	5	1	0	0	3	0	1	2	4	0	1	2	4	2	4	4	18
Information sharing and of best practices	1	0	2	5	0	2	0	4	1	1	2	7	1	1	0	5	3	4	5	22
Others:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<u>Air Navigation Services</u>																				
Advisory support	0	0	1	1	0	5	0	10	0	1	0	2	1	0	3	6	1	6	4	19
Financial support	0	2	0	4	1	0	1	4	3	1	0	11	3	0	0	9	8	3	1	31
Technical expertise and support	0	1	2	7	4	1	0	17	3	2	0	16	0	4	0	11	7	9	2	44

List of Needs	North Asia				South Asia				Southeast Asia				Pacific				Total			
Administrative and logistical support (e.g. Secretariat support, online platforms, interfaces)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	1	3
Ministry/central government support	1	0	0	3	0	0	0	0	0	0	2	2	0	0	1	1	1	0	3	6
Information sharing and of best practices	2	1	0	11	1	0	4	10	1	0	3	9	2	0	0	9	6	1	7	30
Others:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	6
Human Resource Development																				
Advisory support	0	1	0	2	0	1	1	3	1	1	2	7	2	2	0	10	3	5	3	22
Financial support	0	1	0	2	1	2	0	7	1	1	0	5	2	0	1	7	5	4	1	24
Technical expertise and support	2	1	0	8	1	2	2	9	4	1	1	15	1	2	0	7	8	6	3	39
Administrative and logistical support (e.g. Secretariat support, online platforms, interfaces)	0	0	0	0	1	0	1	4	0	0	1	1	0	0	0	0	1	1	2	7
Ministry/central government support	2	0	0	6	3	0	1	10	0	0	1	1	0	1	2	4	5	1	5	22
Information sharing and of best practices	0	1	2	4	0	1	1	3	1	3	1	10	0	1	0	2	1	6	4	19
Others:	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0	3	2	0	0	6
Environmental Protection																				
Advisory support	0	0	0	0	0	1	0	2	1	1	4	9	1	0	2	5	2	2	6	16
Financial support	0	1	0	2	0	1	2	4	0	1	1	3	0	2	1	5	1	5	4	17
Technical expertise and support	2	0	1	7	5	0	0	15	5	2	0	19	4	2	0	16	16	5	1	59
Administrative and logistical support (e.g. Secretariat support, online platforms, interfaces)	0	0	1	1	0	1	0	2	0	0	1	1	0	0	0	0	0	1	2	4
Ministry/central government support	0	1	0	2	0	1	1	3	1	1	0	5	0	0	1	1	1	3	3	12
Information sharing and of best practices	1	1	0	5	0	0	0	0	0	2	2	6	1	1	0	5	2	4	2	16
Others:	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	1	0	0	3

f) Please list the top 3 aviation training areas your State/ Administration would need

- * ANS inspectors
- * Annex 13 attachment C regarding event risk-based analysis

Safety, Security and Aviation Equipment

Emerging issues and technology affecting aviation safety, security and ANS

1. Environment Protection in Aviation
2. Airline Business
3. State Safety Programme

ANS, OPS, PEL. AVSEC

-

1. Aviation safety inspectors
2. Security inspectors
3. ANS inspectors

1. Auditing and Resolution of Safety Concerns 2. Investigations - Accident/Incidents 3. Aviation Security

1. Safety 2. Security 3. Auditor

NIL

NIL

NIL

1. Effective audit technique
2. Technical Assistance Mission on Sustainable Aviation Fuels (SAF)
3. Development of centralize aviation safety management system

1. Trainings for the Trainers, esp. in Safety Management and ANS for middle managers
2. Training courses in Safety Culture in Aviation
3. Trainings for the inspectors

NIL

NIL

1. SMS
2. Flight Standards (Ops)
3. UAV

1. The training areas for the new technology or new practices or regulations
2. The training related to Competency Based Training and Assessment
3. The training related to development in each area

1. PEL
2. OPS
3. AE

NIL

NIL

ANS Inspector Training, Airworthiness Inspector Training, Flight Operation Training

1. Auditing Techniques and Resolution of Safety Issues, 2. Train the Trainer or TIC 3. SSP Gap Analysis and Implementation

1. Train a trainer
2. Safety Trainings
3. Training of Inspectors

1. Change Management for Executives
2. Risk Management
3. Airport Management

1. Safety Oversight Inspectors OPS
2. Safety Oversight Inspectors AIR
3. Safety Oversight Inspectors AvSec

1. Air Navigation Safety area
2. Personnel Licensing area
3. Aerodrome and Ground Aids area

Please provide any other information or comments that will contribute towards enhancing existing frameworks in the region to better address your State/ Administration's needs.

- Mountain PBN for the safe operation of small airplanes and helicopters is urgently required for Nepal due to unique topography and mountain weather. Any support from ICAO in this regard will greatly help Nepal for the safe operation of flights.
- Look forward to the draft action plan and the reviews required to implement and strengthen the resources within the aviation authority and administration and meet the priority needs of a State.
- The Independent State of Papua New Guinea thanks ICAO for this survey.
- More opportunities for Pakistan Aviation professionals to work at ICAO Regional offices as well as ICAO HQ Montreal
- Adequate financial and technical support will contribute towards enhancing existing frameworks to be better address the DCA Myanmar needs.