



ICAO

*International Civil Aviation Organization***Ninth Meeting of the Surveillance Implementation
Coordination Group (SURICG/9)***Bangkok, Thailand, 7 - 10 May 2024*

Agenda Item 3: Review Progress of SURSG**OUTCOME OF THE THIRD MEETING OF THE SURVEILLANCE
STUDY GROUP (SURSG/3) AND UPDATES ON THE FOURTH MEETING OF THE
SURVEILLANCE STUDY GROUP SURSG/4**

(Presented by the Secretariat)

SUMMARY

This paper presents relevant outcomes on the Third Meeting of the Surveillance Study Group (SURSG/3) and updates on the preparation of the Fourth Meeting of the Surveillance Study Group (SURSG/4).

1. INTRODUCTION

1.1 The Third Meeting of the Surveillance Study Group (SURSG/3) was held in Hong Kong, China, with the hybrid option (In-Person and Virtual Participation) *from 22 to 24 March 2023*. The Meeting was attended by **102** participants (25 In-Person and 77 Virtual) from **14** States/Administrations, **2** International Organizations, and **3** industry partners. The meeting report, working papers, information papers, and other resources can be accessed by following link:

<https://www.icao.int/APAC/Meetings/Pages/2023-SURSG-3.aspx>

1.2 The Fourth Meeting of the Surveillance Study Group (SURSG/4) is planned to be held in Hong Kong, China, as an In-Person meeting *from 30 to 31 May 2024* after the Joint event of SWIM over CRV Demonstrations and Surveillance data sharing over SWIM trial planned *from 28-29 May 2024* in Hong Kong China. The Meeting report, working papers, information papers, and other resources can be accessed by following link:

<https://www.icao.int/APAC/Meetings/Pages/2024-SURSG-4.aspx>

1.3 This paper summarized relevant information and updates for both meetings.

2. DISCUSSION***Outcomes of SURSG/3***

2.1 The summary of the discussion in the SURSG/3 Meeting is given in the following paragraphs.

Review of Work Plan for Surveillance Study Group (SURSG) - Hong Kong China (WP/11)

2.2 The paper reviewed and shared recommendations on the Surveillance Study Group Work Plan in view of the progress and development following SURSG/2 held in March 2022. Considering the planned Joint Event for Surveillance Data Sharing in the SWIM Trial and SWIM Over CRV Demonstration (Demo) and the progress of the current Work Plan, the Meeting reviewed the changes proposed to Items 3-2, 4, 4-1 & 4.2 of the Work Plan. SURSG Chair requested the Meeting to provide support and participate in the trial.

2.3 Following the proposed and agreed changes in WP/11 of SURSG/3, it was discussed and agreed that the description of Task 4 (on Guidance Material) would be elaborated to include the incorporation of a section of technical and operational considerations as reference for the preparation of a multilateral agreement for states/parties intending to share surveillance data and the elaborated text is to be discussed at the next SURSG meeting.

2.4 The approved and modified SURSG work plan by the SURSG/3 Meeting is as follows:

| Group | Task | Description | Start | End | Task Owner(s) |
|----------------------|----------------|--|--|---|--|
| Recommendation Stage | 3 | Report on the possible implementation of surveillance data sharing in SWIM | SURSG/2 | SURICG/7 | TBD |
| | 3-1 | Consolidation of all the outcomes of Task 2 into a report according to the contents defined in TOR for submission to SURICG | SURSG/2 | SURICG/7 | Hong Kong China, IATA, Singapore, Thailand, Viet Nam |
| | 3-2 | Preparation of draft multilateral agreement on surveillance data sharing and data consumption [absorbed into Task 4] | SURSG/2 | SURICG/7 (to be reviewed at SURSG/3) | TBD |
| | 4 | Guidance materials for the sharing and access of surveillance data | SURICG/7 (after Demo) | SURICG/9 SURICG/10 | TBD |
| | 4-1 | Preparation of the framework and 1 st draft of guidance material | SURICG/7 SURICG/8 (after Demo) | SURSG/3 SURSG/4 or SURSG/5 ¹ | TBD |
| | 4-2 | Further development of the working draft of guidance material for endorsement by SURICG and CNS SG | SURSG/3 (after Demo) | SURICG/9 SURICG/10 | TBD |

¹ Subject to timing of Demo.

Business Models for Joining the S3TIG Trial – PCCWG (WP/12)

2.5 PCCWG presented proposals on how ANSPs can participate in the upcoming S3TIG Trial, including the CRV connectivity requirements, surveillance data sharing demonstration, and scenario-based demonstration. The SURSG/3 Meeting noted that it would be beneficial to the aviation community if more ATM stakeholders participated in the SWIM Data Exchange. The Meeting was invited to share the number of Member States that will participate in the trial and discuss the scope of the trial for the commercial and technical arrangement.

2.6 The SURSG/3 Meeting shared the need to explore other options for joining the Trial/Demo by States/Administrations that have no CRV connectivity. Additionally, further deliberations were required about the cost implications for states having CRV connectivity but no spare bandwidth to share for the Trial/Demo. It was agreed that S3TIG will incorporate this discussion into the agenda item while preparing the Survey questionnaire.

A Joint Event for Surveillance Data Sharing in SWIM Trial and SWIM over CRV Demonstration - Hong Kong, China (WP/07)

2.7 Hong Kong China proposed combining the surveillance data sharing in the SWIM Trial under S3TIG (“the Trial”) and the SWIM Demonstration over CRV under SWIM TF as a joint event for States’ consideration. It was informed that the proposal on combining the two events would save effort in preparing similar network and system infrastructure for the trial, demonstrate data exchange of different throughput, examine such bandwidth requirements on CRV, and enhance user experience with more types of SWIM services showcased. The SURSG/3 Meeting endorsed that *the Trial* and *SWIM over CRV Demonstration* should be conducted as a Joint Event. However, it was discussed that the proposal needs to be agreed upon by the SWIM TF Meeting. The Seventh Meeting of System Wide Information Management Task Force (SWIM TF/7) held from 9 to 12 May 2023 in ICAO Asia and Pacific Regional Office, Bangkok, Thailand, agreed to conduct both events as a Joint Event.

Trial of Surveillance Data Sharing Using SWIM - Hong Kong, China (WP/08)

2.8 The paper presented the proposal on the items to be demonstrated in the trial of the surveillance data sharing using SWIM under S3TIG for States’ consideration. The trial was proposed to be conducted as a demonstration event followed by an evaluation period of about three months, subject to discussion in S3TIG.

2.9 The SURSG/3 Meeting noted that with live surveillance data sharing being realized among participating States in the trial, the practicality and technology in surveillance data sharing using SWIM could be shown to the audience. In addition, a scenario-based demonstration was proposed to visualize the benefits brought to ATFM operation during the event. Prepared scripts and data, including surveillance data, flight information, MET information, and flow management information, will be exchanged in real time to simulate the data flow of a complete life cycle of an ATFM operation, which cannot be easily captured in a live situation. Other SWIM capabilities proposed to be demonstrated in the event were also shared.

Survey for Expression of Interest (EOI) in participating in Demo/Trial of S3TIG – Sec (SP/01)

2.10 The SURSG/3 Meeting deliberated the proposed questions for Expression of Interest (EOI) in participating in the Joint Event of S3TIG and reviewed the S3TIG Joint Event Tentative Timelines. The SURSG/3 Meeting agreed that the proposed questions need modifications along with the addition of more information to support States/Administrations in responding to the survey.

2.11 The Meeting agreed that the Surveillance Sharing in SWIM Trial Implementation

Group (S3TIG) will amend the questionnaire and prepare supporting documents containing useful information, such as definitions of various terms used in the questionnaire to clear potential doubts of Member States/Administrations responding to the survey and any other necessary modifications. The questionnaire will be a composite survey with 2 separate sets of questions respective to the Trial and SWIM over CRV Demonstration (Demo). The S3TIG will share the part of the questionnaire mainly related to the Demo and the endorsement of the proposal for the Joint Event by SURSG/3 in a joint working paper or a paper by the lead of S3TIG to SWIM TF/7 planned for 9-12 May 2023 in Bangkok, Thailand for SWIM TF/7's agreement.

2.12 The SURSG/3 Meeting also agreed that the survey would be shared with States/Administrations only and not involve any other parties. Additionally, the survey will be shared, after the endorsement of the SWIM TF/7, with Member States/Administrations by the ICAO Secretariat. The S3TIG will draft a formal package/agreement to participate in the Joint Event by Member States/Administrations to be shared with interested States/Administrations after the survey outcomes are processed, analyzed, and interested Members to participate in the Demo/Trial are identified.

2.13 The tentative timelines to conduct the Trial and/or Demo were as follows:

| Task | Responsible Parties | Tentative Timelines/Deadlines |
|--|--|---|
| Finalization of Survey Questionnaire | SURSG/3 and S3TIG Participants, Led by HK China, Thailand, and Singapore | 28 April 2023 |
| Sharing Survey with APAC Member States | ICAO Secretariat | 19 May 2023 (4 weeks will be provided to States to respond) |
| Submission of response and States and possible extension of survey | All Interested APAC States | 23 June 2023 |
| Compilation of Response to Survey | ICAO Secretariat SURSG/S3TIG Chairs/Leads | 30 June 2023 |
| Sharing formal package with agreed Parties to participate in Demo and/or Trial | Agreed Parties and Host State (Hong Kong China) | July 2023 (1 Month will be provided to States to respond) |
| Working-level preparatory Meetings (online/in-person) | Lead and Deputy Lead, agreed Parties | Mid-August 2023 – October 2023 |
| Trial/Demo | Agreed Parties and Host State (Hong Kong China) | November 2023 (Worst case scenario: Q1 2024) |
| Report on Demo | Lead and Deputy Lead | SURSG/4 |

2.14 The abovementioned discussions were performed in the SWIM TF/7 held from 9 to 12 May 2023. The SWIM TF/7 Meeting noted that pseudo-CRV would be used as the network infrastructure for the Demo/Trial, and the ATFM scenario, based on the ASEAN Demonstration, will be refined and enriched to be used in the Demo, which is considered a suitable use case to demonstrate

the operational benefits brought by SWIM. The SWIM TF/7 Meeting also noted that S3TIG is surveying to gauge States' interest in participating in the joint event.

2.15 The SWIM TF/7 Meeting reviewed and modified the questionnaire and agreed that the ICAO Secretariat would share the survey questionnaire with APAC Member States by 19 May 2023, as agreed upon at the SURSG/3 Meeting. Once received, Member States were requested to expedite the response to the survey due to tight timelines to conduct the Trial/Demo by Q4 of 2023 or Q1 of 2024.

2.16 The survey questionnaire was circulated through ICAO APAC State Letter Ref.: T 8/13.1: AP071/23 (CNS) with Subject – *Survey on a Joint Event of SWIM over CRV Demonstration ("the Demo") and Surveillance Data Sharing in SWIM Trial ("the Trial")* on 16 May 2023, which expected Member States/Administrations to submit the completed survey preferably not later than 12 June 2023.

2.17 Of a total of 16 questionnaire returns, 8 States (Australia, Hong Kong China, India, Japan, Malaysia, Republic of Korea, Singapore and Thailand) agreed to participate as surveillance data contributors and/or consumers, while 7 States (China, Fiji, Indonesia, Laos PDR, New Zealand, Pakistan and Philippines) shared their intention as observers.

Data Format for Surveillance Data Sharing – Hong Kong, China (WP/06)

2.18 Hong Kong China presented the proposal on the data format to be exchanged in the trial of the surveillance data sharing using SWIM under S3TIG for States' consideration. As a recommendation from the Study Report delivered under SURSG, the trial to be conducted under S3TIG would adopt the ADS-B CAT 21 Version 2.1 data format to support ATFM operation. The paper compared the pros and cons of using FIXM, JSON, and original ASTERIX data and suggested that using the original ASTERIX data format as the payload for SWIM data exchange would be a preferred option. Based on the ASEAN Demonstration, the AMQP headers were proposed to carry the surveillance data payload.

State of SWIM implementation in Singapore and readiness to share ADS-B data – Singapore (WP/09)

2.19 Singapore presented the progress of SWIM implementation in Singapore and its impact on the sharing of surveillance information, specifically ADS-B data from the Singapore ADS-B sensor. Singapore shared its plan for upgrading the SWIM infrastructure, which includes a provision for the connection to the CRV through which data can be shared. After completing the SWIM upgrading works, Singapore shared its intention to publish the ADS-B data from the Singapore ADS-B sensor for consumption by approved parties as an ASTERIX-based JSON formatted message similar to the current ADS-B service in the Singapore SWIM is provisioned.

2.20 Considering that the format for ADS-B data sharing has not yet been decided upon, Singapore proposed that the Meeting direct the S3TIG group to deliberate on this matter and consider the appropriate message format to facilitate ADS-B data exchange.

2.21 The SURSG/3 Meeting discussed the pros and cons of different data formats proposed in the WP/06 and concurred that ASTERIX and JSON both may be considered potential data formats for conducting the trial and SWIM over CRV demonstration. Another proposal was to add a question related to the preferred data format, with ASTERIX and JSON data format as potential answers, in the Survey questionnaire to be prepared by S3TIG to better understand the readiness of interested demo/Trial parties. S3TIG discussed the requirements of the proposed question to add to the survey questionnaire and further deliberated on this topic of interest and priority and proposed data format(s) for the Trial and Demo.

Benefits of Surveillance Data Sharing for MET Information Services in SWIM - Hong

Kong, China (IP/02)

2.22 Hong Kong Observatory (HKO), under Hong Kong China, presented how future MET information services could be enhanced using the surveillance data shared in SWIM. The Meeting noted that MET information to be exchanged in SWIM includes ICAO Meteorological Information Exchange Model (IWXXM) messages, gridded products, and imagery. In particular, the four dimensions (4D) MET information service can also provide users with on-demand access to polygons or images of high-impact weather phenomena derived from the gridded products, which is useful to aviation users for assessing the potential impact of weather on their flight trajectory over time. Furthermore, the benefits of surveillance data for MET information services to ANSP and airlines were elaborated.

2.23 SURSG Chair requested to explore the possibility of including the elements and proposed applications in the IP/02 paper for demonstration in the proposed Joint Event, which was agreeable to HKO and the Meeting.

Lessons Learned in Sharing Surveillance Data using SWIM Information Service - Republic of Korea (WP/10)

2.24 The paper presented ROK's lessons learned in the exchange of surveillance data through a SWIM information service, specifically through the utilization of the Advanced Message Queuing Protocol (AMQP) based messaging services. With the introduction of characteristics of surveillance data, the SURSG/3 Meeting noted ROK had implemented SWIM information services for surveillance data and is currently working on the SWIM testbed. Additionally, the considerations for future implementation and lessons learned were shared with the Meeting. In response to a question, ROK clarified that it provides both ASTERIX and JSON data formats to the Stakeholders based on Stakeholder's needs.

Review ToR and Action Items List – Sec (WP/04)

2.25 The paper presented the current ToR of SURSG and S3TIG and the Action item list of SURSG Meetings for SURSG/3 meeting review and update. The SURSG/3 Meeting noted that there was no need to update the ToR of both groups and the Action Items list was discussed and updated by the SURSG/3 Meeting, which is provided in Appendix B of the Report.

Date and Venue for the Next Meeting

2.26 The SURSG/3 Meeting discoursed the date and venue of the next SURSG Meeting. It was advised that the next Meeting of SURSG should be held after the proposed Surveillance data sharing in the SWIM Trial and the SWIM Demonstration over CRV Demonstration are completed. The SURSG/3 Meeting agreed that the next Study Group Meeting would be In-Person after successfully completing the Joint Event. The ICAO Secretariat will inform participants about the exact dates and venue in due course.

Outcomes of SWIM TF/8 Meeting

2.27 The Eighth Meeting of the SWIM (SWIM TF/8) was held from 8 to 10 November 2023 in the ICAO Asia and Pacific Regional Office, Bangkok, Thailand. The Meeting was attended by 79 participants from 15 States/Administrations, 3 International Organizations and 1 telecommunication service provider. The SWIM TF/8 meeting report, working papers, information papers, and other resources can be accessed at <https://www.icao.int/APAC/Meetings/Pages/2023-workingSessionandSWIMTF8.aspx>

Progress Update by S3TIG for the Joint Event of SWIM Demonstration over CRV and Surveillance Sharing in SWIM Trial – Hong Kong China (WP/06)

2.28 The paper presented the progress update of the joint event of SWIM Demonstration over CRV and Surveillance Data Sharing in the SWIM Trial (the Joint Event). The Meeting noted that the survey questionnaire prepared by SURSG/3 was shared with States by the ICAO APAC Office on 12 June 2023. A total of 16 questionnaire responses were received from 8 States to participate as surveillance data contributors and/or consumers, while 7 States were observers. A summary of the progress made between June and October 2023 in preparing for the Joint Event was also presented.

2.29 It was highlighted that the surveillance data to be shared in the Joint Event will be mainly ADS-B data and the surveillance data payload will be in ASTERIX and JSON formats. Additionally, the Meeting noted that to increase the Joint Event's appeal and promote SWIM, a self-service and purpose-built platform to support aviation community users is being explored for incorporation into the Joint Event, subject to availability and technical readiness. The Meeting was requested to provide input on future/potential SWIM services/applications for the Joint Event. Sri Lanka and Vietnam expressed interest in joining the Joint Event as observers.

Updates on Joint Event and the SURSG/4

2.30 After the SWIM TF/7 Meeting, which was conducted from 8-11 May 2023, the S3TIG and SWIM Implementation Pioneer Ad-Hoc Group (SIPG) met monthly to prepare for the joint event. As an outcome of the collaborative and hard work of S3TIG and SIPG, the joint event of SWIM over CRV Demonstration (the Demo) and Surveillance data over SWIM Trial (the trial), is being organized from **28 May to 29 May 2024**, along with the Fourth Meeting of the Surveillance Study Group (SURSG/4) from **30 May to 31 May 2024** in Hong Kong China.

2.31 The Joint Event objective is to demonstrate the practicability and benefits to States/Administrations of carrying SWIM data over CRV and hosting potential SWIM services over the CRV network to encourage Asia-Pacific States/Administrations to implement SWIM within Asia-Pacific SWIM Implementation timelines (2024-2030) adopted by Asia/Pacific Air Navigation Planning and Implementation Regional Work Group (APANPIRG) by Conclusion APANPIRG/33/9.

2.32 The Joint Event is a result of the consolidated efforts of Surveillance Sharing in the SWIM Trial Implementation Group (S3TIG) and SWIM TF to showcase the benefits brought by SWIM through operational scenario demonstration, trial of surveillance data sharing and presentation of potential SWIM services over CRV. A dedicated and segregated Pseudo CRV network instead of the operational one is utilized for the Joint Event to avoid potential impact on the operational CRV. The Joint Event is made possible with the support of 8 key contributor States, including Australia, Hong Kong China, India, Japan, Malaysia, the Republic of Korea, Singapore, and Thailand as data contributors and/or consumers, and 9 observer States including China, Fiji, Indonesia, Laos PDR, New Zealand, Pakistan, Philippines, Sri Lanka and Vietnam. The first day of the Joint Event (28 May 2024) is dedicated to system setup preparation and rehearsal by active participants, whereas the formal demonstration will take place the next day (29 May 2024).

2.33 The SURSG/4 Meeting, being organized from 30-31 May 2024 after the Joint Event, objective is to provide expert views and recommendations to achieve harmonized sharing of surveillance data in SWIM in the Asia and Pacific (APAC) Region along with the potential models of sharing of surveillance data in SWIM according to the Surveillance Strategy adopted by APANPIRG and in support of ICAO's GANP and ASBU initiatives.

2.34 The State letter sharing information about both meetings, agenda items, and other required information is shared with APAC States/Administrations by State letter Ref: T 8/ 2.9, 2.10 & 2.11 – AP043/24 (CNS) on 08 March 2024 (**Appendix A**).

2.35 As per the current plan, as most deliverables except one *Guidance material for the sharing and access of surveillance data* allocated to SURSG are completed and most objectives are

achieved, the SURSG/4 Meeting will propose the dissolution of the SURSG if the joint event is successful and after the completion of the remaining deliverable and presentation at future SURICG meetings. If SURSG/4 would come to the conclusion of dissolution, the decision would seek the endorsement of SURICG and then CNS SG accordingly.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the information in this paper;
- b) discuss the proposed plan for SURSG; and
- c) discuss any matters as appropriate.



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Ref.: T 8/ 2.9, 2.10 & 2.11 – AP043/24 (CNS)

08 March 2024

Subject: Invitation to the Joint Event and the Fourth
Meeting of the Surveillance Study Group (SURSG/4)
(Hong Kong, China, In-Person Meeting, 28 – 31 May 2024)

Actions Required:

- 1) To submit paper(s) and/or presentation(s) by **10 May 2024**; and
- 2) To complete the online registration by **10 May 2024**.

Dear Sir/Madam,

I am pleased to invite your State/Administration to participate in Joint event of **SWIM over CRV Demonstration (the Demo)** and **Surveillance data over SWIM Trial (the Trial)**, referred to as *the Joint Event*, from *28 May to 29 May 2024* along with **the Fourth Meeting of the Surveillance Study Group (SURSG/4)** from *30 May to 31 May 2024* to be held in Hong Kong China. The Joint Event objective is to demonstrate the practicability and benefits to States/Administrations of carrying of SWIM data over CRV and hosting of potential SWIM services over the CRV network to encourage Asia-Pacific States/Administrations to implement SWIM within **Asia-Pacific SWIM Implementation timelines (2024-2030)** adopted by Asia/Pacific Air Navigation Planning and Implementation Regional Work Group (APANPIRG) by **Conclusion APANPIRG/33/9**.

The Joint Event is a result of the consolidated efforts of Surveillance Sharing in the SWIM Trial Implementation Group (S3TIG) and System Wide Information Management Task Force (SWIM TF) to showcase the benefits brought by SWIM through operational scenario demonstration, trial of surveillance data sharing and presentation of potential SWIM services over CRV. A dedicated and segregated Pseudo CRV network instead of the operational one is utilized for the Joint Event to avoid potential impact on the operational CRV. The Joint Event is made possible with the support of 8 key contributor States, including Australia, Hong Kong China, India, Japan, Malaysia, the Republic of Korea, Singapore, and Thailand as data contributors and/or consumers, and 9 observer States including China, Fiji, Indonesia, Laos PDR, New Zealand, Pakistan, Philippines, Sri Lanka and Vietnam. The first day of the Joint Event (28 May 2024) is dedicated to system setup preparation and **rehearsal** by active participants of the Joint Event whereas the formal demonstration would take place the next day (29 May 2024). A tentative program of the Joint Event is provided in **Attachment A**.

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SURSG/4 is to take place 30-31 May 2024, after the Joint Event. The main objective of the SURSG is to provide expert views and recommendations to achieve harmonized sharing of surveillance data in SWIM in the Asia and Pacific (APAC) Region along with the potential models of sharing of surveillance data in SWIM according to the Surveillance Strategy adopted by APANPIRG and in support of ICAO's GANP and ASBU initiatives. The provisional agenda of the SURSG/4 Meeting is provided in **Attachment B** to this letter.

To make the Meeting more productive and effective, it is strongly urged that States/International Organizations submit Presentations, Working Papers, or Information Papers relevant to the proposed agenda in Word/PowerPoint format to this office by e-mail to apac@icao.int with copies to vmeefuengsart@icao.int and snibhani@icao.int at the earliest convenience, but no later than **10 May 2024**. If papers are received after 10 May 2024, they will be treated as flimsies.

Delegates are advised that the ICAO Regional Office is moving towards a 'paperless' meeting environment by promoting electronic media for all meeting materials. The delegates are encouraged to take advantage of the wireless network facility and should bring a portable device equipped with Wi-Fi networking capability for the Meeting. The Working and Information Papers, presentations, and other related documents for the SURSG/4 Meeting will be available on the ICAO website at <https://www.icao.int/APAC/Meetings/Pages/2024-SURSG-4.aspx>. All delegates should obtain meeting materials from the SURSG/3 meeting web page before the commencement of the Meeting.

The meeting bulletin containing information about the Meeting venue, recommended hotels, and other information of interest, along with administrative arrangements, is provided in **Attachment C**. All costs to attend the Meeting in Hong Kong, China, including travel, accommodation, health insurance, and other miscellaneous expenses, will be borne by the respective States/Administrations.

I would be grateful if you would take advantage of the Meeting and nominate participant(s) to join the Meeting by **completing the online registration** using <https://www.icao.int/APAC/Meetings/Pages/2024-SURSG-4.aspx> at your earliest convenience, but no later than **10 May 2024**, as after this, the link will be closed automatically. The guidelines to complete online registration are provided in **Attachment D** to this letter.

Yours sincerely,



Tao Ma
Regional Director

Enclosures:

- Attachment A – Tentative Program of Joint Events
- Attachment B- Provisional Agenda Items of SURSG/4 Meeting
- Attachment C – Meeting Bulletin
- Attachment D – Guideline to complete online registration

**Joint Event of SWIM over CRV Demonstration and Surveillance Data Sharing in
SWIM Trial**

28 - 29 May 2024, Hong Kong China

Tentative schedule and Agenda items

| <u>28 May 2024</u> (Tue, Day 1) | | System Setup and Dress Rehearsal |
|--|--|---|
| 09:00-09:30 | Registration | |
| 09:30-10:00 | (a) Opening Remarks by HKCAD as Event Host (b) Administrative Information (c) Technical Information | |
| 10:00-10:45 | Scenario 1 (ATFM & Surveillance Data Sharing) Demonstration <i>[Lead by HK China]</i> | |
| 10:45-11:15 | Coffee Break | |
| 11:15-12:00 | Scenario 2 (FF-ICE) Demonstration <i>[Lead by JCAB/Aerothai]</i> | |
| 12:00-12:30 | Scenario 3 (MET) Demonstration <i>[Lead by Korea]</i> | |
| 12:30-14:00 | Lunch | |
| 14:00-15:00 | Local SWIM Demonstration for Aviation Support Service Providers <i>[Lead by PCCW Global]</i> | |
| 15:00-15:30 | Wrap-up of the day | |
| <u>29 May 2024</u> (Wed, Day 2) | | Event |
| 09:00-09:30 | Registration | |
| 09:30-10:30 | (a) Opening Remarks by HKCAD as Event Host (b) Administrative Information (c) Presentation by Dr. Amornrat Jirattigalachote, SWIM TF Chair (SWIM over CRV) (d) Presentation by Mr. Vincent Wong, SURSG Chair (Surveillance Data Sharing) (e) Group Photo | |
| 10:30-11:00 | Coffee Break | |
| 11:00-12:30 | (a) Scenario 1 (ATFM & Surveillance Data Sharing) Demonstration <i>[Lead by HK China]</i> (b) Scenario 2 (FF-ICE) Demonstration <i>[Lead by JCAB/Aerothai]</i> | |
| 12:30-14:00 | Lunch | |
| 14:00-15:30 | (a) Scenario 3 (MET) Demonstration <i>[Lead by Korea]</i> (b) Local SWIM Demonstration for Aviation Support Service Providers and Panel Discussion (Speakers - TBC) <i>[Lead by PCCW Global]</i> | |
| 15:30-16:00 | Coffee Break | |
| 16:00-16:20 | (a) Lessons Learnt from SWIM perspective <i>[Lead by Singapore]</i> (b) Lessons Learnt from CRV perspective <i>[Lead by PCCW]</i> (c) Closing Remarks by HKCAD as Event Host | |
| 16:20-17:20 | Technical Visit – Digital Tower Facilities, Control Tower Simulator | |

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The Fourth Meeting of the Surveillance Study Group (SURSG/4) and the Third Meeting of Surveillance Sharing in SWIM Trial Implementation Group (S3TIG/3)

(Hong Kong China, 30-31 May 2024)

PROVISIONAL AGENDA

- | | |
|----------------|---|
| Agenda Item 1: | Adoption of Agenda |
| Agenda Item 2: | Review of the outcome of relevant meetings |
| Agenda Item 3: | Progress update of SURSG tasks under the work plan |
| Agenda Item 4: | Progress update of Surveillance Sharing in SWIM Trial Implementation Group (S3TIG) and Outcome of SWIM over CRV Demonstration and Surveillance Data Sharing |
| Agenda Item 5: | Technical coordination on surveillance data sharing and demonstration |
| Agenda Item 6: | Discussion of technical issues and solutions in surveillance data sharing |
| Agenda Item 7: | States' experience with Surveillance data sharing |
| Agenda Item 8: | Review of SURSG/S3TIG ToR, work plan/programme and way forward for SURSG |
| Agenda Item 9: | Next meeting and any other business |



ICAO

International Civil Aviation Organization

Joint Event and the Fourth Meeting of Surveillance Study Group (SURSG/4)

Hong Kong China, 28-31 May 2024

THE MEETING BULLETIN

1. Schedule and Venue of the Meeting

1.1. The Joint Event will commence on **Tuesday, 28 May 2024**, starting with a dress rehearsal, and followed by a Demonstration/Trial on **Wednesday, 29 May 2024**.

1.2. The opening session of the SURSG/4 Meeting will be held at **0900 hrs. Hong Kong Time (HKT, i.e. UTC +8)** on **Thursday, 30 May 2024**.

1.3. The Joint Event and SURSG/4 Meeting will be held at the Auditorium of Civil Aviation Department (CAD) Headquarters, Hong Kong China. The detailed address of the meeting venue is:

**Civil Aviation Department (CAD) Headquarters,
1 Tung Fai Road,
Hong Kong International Airport,
Lantau, Hong Kong China**

1.4. The program will be available on the Meeting webpage at <https://www.icao.int/APAC/Meetings/Pages/2024-SURSG-4.aspx>

2. Officers and Secretariat concerned with the Meeting

2.1. Secretaries of the Meeting:

Ms. Soniya Nibhani, Regional Officer ANS (CNS) Implementation
Tel: +66 (2) 537 8189 Ext. 155
Fax: +66 (2) 537 8199
E-mail: snibhani@icao.int

3. Registration of Participants

3.1. Each participant should ensure that their respective State/Organization nominate participant(s) to join the meeting by completing the online registration using <https://www.icao.int/APAC/Meetings/Pages/2024-SURSG-4.aspx> no later than **10 May 2024**, as after this the link will be closed automatically to accept registrations.

3.2. In case of multiple delegates are nominated from a State/Organization, each nominated delegate should register themselves separately.

Joint Event

3.3. Participants are requested to register at the Registration Desk between 0900 and 0930 hrs. HKT on the first day of the Joint Event (28 May 2024) and collect designated badges. Participants are required to wear the badges throughout the period of the Meeting for easy identification.

SURSG/4

3.4. Participants are requested to register at the Registration Desk between 0830 and 0900 hrs. HKT on the opening day of SURSG/4 Meeting (30 May 2024) and collect designated badges. Participants are required to wear the badges throughout the period of the Meeting for easy identification. **Participants who attended the Joint Event are required to register again for SURSG/4 meeting.**

4. Meeting materials

4.1. The Secretariat will upload the Meeting materials (i.e. documentation, papers, templates, instructions, etc.) available in electronic format prior to the Meeting on the ICAO APAC Office Meeting webpage at <https://www.icao.int/APAC/Meetings/Pages/2024-SURSG-4.aspx>.

4.2. Each participant should review all working papers and supporting information papers prior to the commencement of the Meeting discussion sessions.

4.3. Participants wishing to submit papers for consideration by the Meeting must do so, via e-mail to the ICAO APAC Office at: apac@icao.int with copies to snibhani@icao.int and vmeeffuengsart@icao.int as early as possible and in any case **no later than 10 May 2024**

5. Useful Travel Information

5.1. Visa and Entry Requirements

5.1.1 A valid travelling document is necessary for all persons entering Hong Kong Special Administrative Region (SAR), China. Visitors from most countries do not require a visa for attending the Meeting but some do. Please visit the website of the Immigration Department of the Hong Kong SAR, China (<http://www.immd.gov.hk/eng/services/visas/visit-transit/visit-visa-entry-permit.html>) on the Visit Visa / Entry Permit Requirements and the length of stay permitted in Hong Kong that is applicable to you. You can also obtain further advice from your closest Chinese Diplomatic or Consular Mission.

5.2. Currency and Credit Cards

5.2.1. The Hong Kong Dollar is the official currency of the Hong Kong Special Administrative Region. Hong Kong has a comprehensive automatic teller machines network, and credit cards are widely accepted.

5.3. Language

5.3.1. The official languages are Chinese (Cantonese and Mandarin) and English (widely spoken in the Government and by the legal, professional and business sectors).

5.4. Weather

5.4.1. The Hong Kong Observatory (www.hko.gov.hk) provides weather forecasts, including a useful 9-day forecast.

5.5. Electricity

5.5.1. Mains electricity supply is 50Hz alternating current at 220 Volts. The majority of power sockets take a three-pronged square-style plug as shown below.



Figure 1 – Common power socket

5.6. Water

5.6.1. Water from public mains meets international health standards. Electric kettles are available in most hotels. Bottled water is readily available.

5.7. Telephone

5.7.1. Public telephones accept coins, credit cards or phone cards. Prepaid SIM cards can be purchased at convenience stores.

5.8. Tipping

5.8.1. Most hotels and restaurants add a 10% service charge to bills. Some people reward good service with an additional 5% and give porters and the like a small tip. Rounding the taxi fare up to the nearest dollar as a small tip is a common practice, while taxi should follow meter to charge as the baseline.

5.9. Time Zone

5.9.1. Hong Kong is eight hours ahead of Coordinated Universal Time (UTC +8).

5.10. Other Useful Information

5.10.1. Discover Hong Kong (<https://www.discoverhongkong.com/>) is a website hosted by the Hong Kong Tourism Board which provides other useful travel and tourist information.

6. Hotel Reservations and Transportation

6.1. A list of hotels located in proximity of the Meeting Venue is provided in **Appendix A** for reference. For information of other hotels, delegates may refer to the comprehensive list of hotels in Hong Kong which can be found in the website hosted by the Hong Kong Tourism Board (<https://www.discoverhongkong.com/eng/plan/accommodation.html>).

6.2. The nearest MTR (Mass Transit Railway) station to CAD Headquarters is Tung Chung Station. Public bus route no. S1 (read as S-one) is serving commuters between the Tung Chung Station, the CAD Headquarters, Asia-World-Expo and Terminal 1 of Hong Kong Airport at approximately 5-10

minutes intervals daily from 0530 to 0000 hours. The bus is operating in circular route with a fare of HK\$3.5 per journey. Alternatively, taxi from Tung Chung Station to the CAD Headquarters will take about 5-10 minutes. The following map briefly illustrates the locations of bus terminus for public bus route no. S1 and taxi stand.

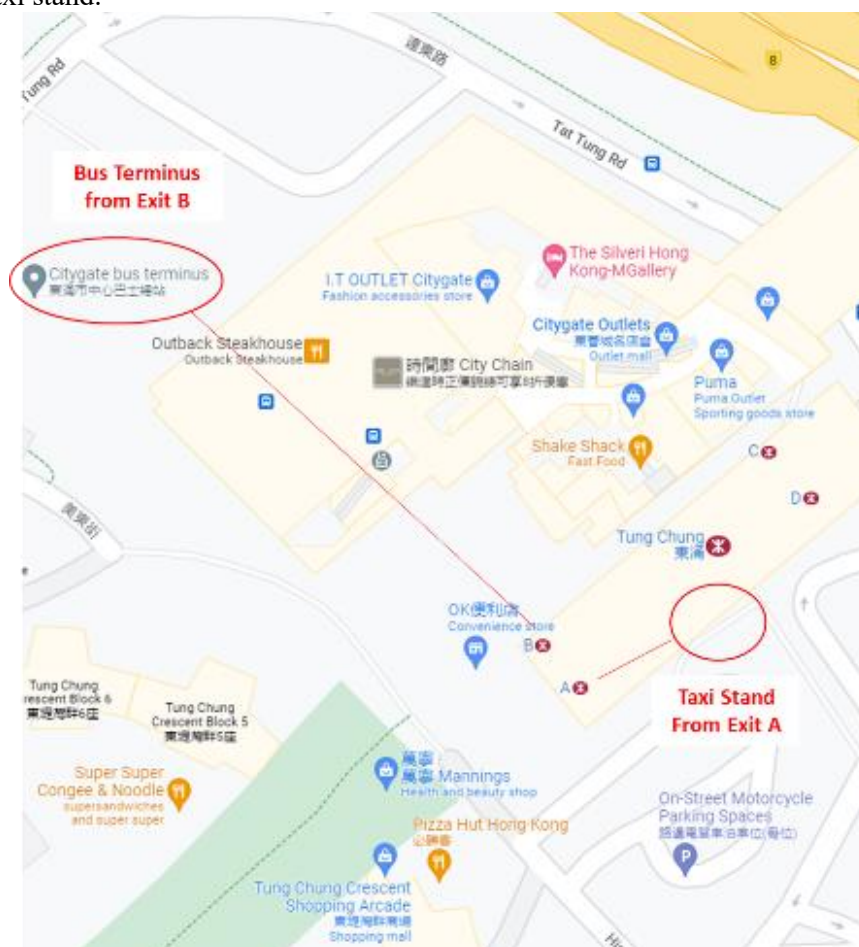


Figure 2 – Public Transport near MTR Tung Chung Station

7. Other Assistance

7.1. While delegates are expected to make their own visa / transport / hotel accommodation arrangements, any enquiries regarding the arrangements for the Meeting and any assistance for necessary visa application are welcomed. For further information, please contact the following officers of the Civil Aviation Department, Hong Kong, China at:

Miss Ava Chan
Executive Officer

Phone: (852) 2910 6297

Email: aynchan@cad.gov.hk

Ms Yumi Tung

Electronics Engineer

Phone: (852) 2910 6578

Email: yymtung@cad.gov.hk

**Hotel Information
(In Alphabetic Order)**

1. Four Points by Sheraton Hong Kong Tung Chung

Address: 9 Yi Tung Road,
Tung Chung, Lantau Island, Hong Kong

Telephone no.: (852) 2352 8035

Fax no.: (852) 2352 8011

Website: www.fourpointshongkongtungchung.com

Special Rates: Traditional Room (20 sq. m)

Room Rate: HK\$800+10% service charge per room per night (room only);
HK\$900+10% service charge per room per night (with daily breakfast for 1 person); and
HK\$1,000+10% service charge per room per night (with daily breakfast for 2 persons)
Optional Upgrade to Ocean View Room with an additional charge at HK\$200+10% service charge per room per night
For reservation, please click the following booking link:
<https://www.marriott.com/event-reservations/reservation-link.mi?id=1709289674465&key=GRP&app=resvlink>

Transportation: Hong Kong International Airport (HKIA)
The Hotel provides complimentary airport shuttle bus service between Hong Kong International Airport and the Hotel running every 1 hour daily from 06:45 (departs from Hotel) to 23:15 (departs from Airport). Reach the Coach Station on the G/F of Arrivals Hall B. Journey takes approximately 10 minutes.

2. Hong Kong Disneyland Resort

Address: Hong Kong Disneyland Resort,
Lantau Island, Hong Kong

Telephone no.: (852) 1830 830

Fax no.: N/A

Email: Reservations@hongkongdisneyland.com

Website: <https://www.hongkongdisneyland.com/?located=true>

Transportation: Hong Kong International Airport (HKIA)
Rental of limousine services for transportation from HKIA is available. Delegates wishing to arrange such service should liaise with the Hotel once the hotel reservation has been confirmed.

Hotel Information

3. Hong Kong Skycity Marriott Hotel

Address: 1 Sky City Road East,
Hong Kong International Airport,
Lantau, Hong Kong

Telephone no.: (852) 3051 2767

Fax no.: (852) 3969 2288

Email: mhrs.hkgap.reservations@marriott.com

Website: www.skycitymarriott.com

Transportation: Hong Kong International Airport (HKIA)

There is a complimentary scheduled hotel shuttle bus for hotel's guests to/from the HKIA Passenger Terminal. On arrival to HKIA, please proceed directly to Bay 29-30 of the Coach Station in Terminal 2. Delegates may also travel between the hotel (Asia-World Expo Station) and HKIA (Airport Station) by taking the Airport Express train. The walk between the hotel and Asia-World Expo Station takes about 5 minutes. The train journey takes about 1 minute.

4. Novotel Citygate Hong Kong

Address: 51 Man Tung Road,
Tung Chung, Hong Kong

Telephone no.: (852) 3602 8888

Fax no.: (852) 3602 8899

Email: H6239@accor.com

Website: www.novotelcitygate.com

Special Rates: Standard Room (Queen Bed) with daily breakfast included.

Room Rates: HK\$1,000 for 27 – 30 May 2024; and
HK\$1,150 for 31 May 2024

Transportation: Hong Kong International Airport (HKIA)

There is a complimentary scheduled hotel shuttle bus for hotel's guests to/from the HKIA Passenger Terminal. On arrival to HKIA, please approach Counter B16 in the Arrival Hall or proceed directly to Bay 29-30 of the Coach Station in Terminal 2. HKIA can also be reached by taking a short taxi or public bus (Route No. S64, S1 or S56) trip. The journey takes about 5-10 minutes.

Hotel Information

5. Regal Airport Hotel

Address: 9 Cheong Tat Road
Hong Kong International Airport
Chek Lap Kok, Lantau, Hong Kong

Telephone no.: (852) 2286 8888

Fax no.: (852) 2286 8686

Email: info@airport.regalhotel.com

Website: <http://airport.regalhotel.com>

Special Rates: Superior Room (27 sq. m) at daily rate HK\$1,030+10% service charge (for one person) / HK\$1,180+10% service charge (for two persons);

Deluxe Room (29 sq. m) at daily rate HK\$1,180+10% service charge (for one person) / HK\$1,330+10% service charge (for two persons).

Both room types include daily breakfast.

For reservation, please click the following booking link:
https://www.booking.regalhotel.com/default.aspx?s=d1i6eHz9yG3jk6NuiudwMW03HAOtSyHdC1_HiRv3QEpk3mSinET4TA==

Transportation: Hong Kong International Airport (HKIA)

The Hotel is connected directly to the HKIA Passenger Terminal 1 by a covered walkway. The walk between the hotel and HKIA takes about 2 minutes. Free Shuttle Bus Service is available between Hong Kong International Airport, Regal Airport Hotel, Regala Skycity Hotel and Tung Chung MTR Station, on first-come-first-served basis. The journey takes about 10-15 minutes.

6. Regala Skycity Hotel

Address: 8 Airport Expo Boulevard,
Hong Kong International Airport,
Chek Lap Kok, Lantau, Hong Kong

Telephone no.: (852) 3556 3288

Fax no.: (852) 3556 3299

Email: info@skycity.regala-hotels.com

Website: <http://skycity.regala-hotels.com/>

Special Rates: Garden View Room (17sq. m) at daily rate HK\$830+10% service charge (for one person) / HK\$930 (for two persons)

Seaview Room (17 sq. m) at daily rate HK\$1,080+10% service charge (for one person) / HK\$1,180+10% service charge (for two persons)

Both room types include daily breakfast.

Hotel Information

For reservation, please click the following booking link:
https://www.booking.regalhotel.com/default.aspx?s=d1i6eHz9yG3jk6NuiudwMW03HAOtSyHdC1_HiRv3QEpk3mSinET4TA==

Transportation: Hong Kong International Airport (HKIA)

The Hotel is connected directly to AsiaWorld-Expo with 2 minutes' walk via the enclosed link bridge. Free Shuttle Bus Service is available between Hong Kong International Airport, Regal Airport Hotel, Regala Skycity Hotel and Tung Chung MTR Station, on first-come-first-served basis. The journey takes about 10-15 minutes.

7. Sheraton Hong Kong Tung Chung Hotel

Address: 9 Yi Tung Road,
Tung Chung, Lantau Island, Hong Kong

Telephone no.: (852) 2535 0035

Fax no.: (852) 2535 0011

Website: www.sheratonhongkongtungchung.com

Special Rates: Deluxe Room (26 sq. m)

Room Rate: Rates at HK\$1,440+10% service charge per room per night (room only); HK\$1,590+10% service charge per room per night (with daily breakfast for 1 person); and HK\$1,740+10% service charge per room per night (with daily breakfast for 2 persons);

Optional Upgrade to Ocean View Room with an additional charge at HK\$200+10% service charge per room per night

For reservation, please click the following booking link:

<https://www.marriott.com/event-reservations/reservation-link.mi?id=1709288285518&key=GRP&app=resvlink>

Transportation: Hong Kong International Airport (HKIA)

The Hotel provides complimentary airport shuttle bus service between Hong Kong International Airport and the Hotel running every 1 hour daily from 06:45 (departs from Hotel) to 23:15 (departs from Airport). Reach the Coach Station on the G/F of Arrivals Hall B. Journey takes approximately 10 minutes.

Hotel Information

8. The Silveri Hong Kong-MGALLERY

Address: 16 Tat Tung Road,
Tung Chung, Hong Kong

Telephone no.: (852) 3602 8989

Fax no.: (852) 3602 8990

Email: HA4A4-SL1@accor.com, please contact Miss Yulia Sirkina

Special Rates: Classic Room (26 sq. m) with breakfast for 1 person

Room Rates: HK\$1,300 for Sunday - Thursday; and
HK\$1,450 for Friday & Saturday

For reservations and enquiry, please send email HA4A4-SL1@accor.com / OR yulia.sirkina@accor.com, and mention code: CAD.

Special offer is valid for the reservations received on or before 30 Apr 2024; after that date 20% off the Best Unrestricted Rate of the day on Classic room might be offered.

Transportation: Hong Kong International Airport (HKIA)

There is a complimentary scheduled hotel shuttle bus for hotel's guests to/from the HKIA Passenger Terminal. On arrival to HKIA, please proceed directly to Bay 29-30 of the Coach Station in Terminal 2. Delegates may also travel between the hotel (Asia-World Expo Station) and HKIA (Airport Station) by taking the Airport Express train. The train journey takes about 1 minute.

GUIDELINES FOR ONLINE REGISTRATION

Step 1: Open the link for the event you are registering for and select Register for this Event button

The screenshot shows a web browser window with the URL <https://events.icao.int/event-details?campaignID=756d23d1-90d5-ea11-80f2-001dd8b71c70>. The page header features the ICAO logo and the text "UNITING AVIATION A UNITED NATIONS SPECIALIZED AGENCY". The main content area is titled "Online Registration" and includes the following information:

- APAC Regional Webinar on Economic Impact of COVID-19 on Civil Aviation and the Financial Alleviation Measures (Registration Open)
- Thursday, August 13, 2020 12:00 PM – Thursday, August 13, 2020 3:00 PM
- Event Address:
RSO Beijing
ICAO Asia & Pacific Regional Sub-Office (APAC RSO) Beijing
Beijing, China, 100621
- Contact information: APAC-RSO@icao.int

A blue button labeled "Register for this Event" is prominently displayed. On the left side of the page, there is a sidebar with links: "Meetings & Events", "Frequently Asked Questions", and "My Events". The footer contains links for "Contact ICAO", "The United Nations", "Terms and Conditions", "External Resources", "Web Support", "Site Index", "FAQ", and "© International Civil Aviation Organization".

Step 2: Login to the Page if you have ever used this portal or skip to step 3 for New users

The screenshot shows the "Event Registration Log-in" page. The header is identical to the previous page. Below the header is a large banner image showing the ICAO logo and the text "ORGANISATION DE L'AVIATION CIVILE INTERNATIONALE" and "INTERNATIONAL CIVIL AVIATION". The main content area is titled "Event Registration Log-in" and includes the following fields and options:

- Email Address:
- Password:
- ☒ This is a public or shared device
Select this option if you are on a public or shared device. Be sure to sign out when you have finished and close all windows to end your session.
- ☐ This is a private device
Select this option if you are the only person who uses this device. The service will allow a longer period of inactivity before signing you out.
- ☐ I'm not a robot (with a CAPTCHA image)
- A blue "Login" button.

On the left side of the page, there is a sidebar with links: "Event Registration Log-in", "Request an Account", and "Password Reset". The footer shows the Windows taskbar with the search bar and various application icons.

If you have ever Registered for any ICAO event using this portal, please enter you email address and password, Select the Captcha and finally click login to open the Next Page and complete the registration.

Step 2a: Once you login, the system will open a registration page with pre-populated information.

Step 2b: Complete the remaining required fields and click "Register Now".

Step 2c: Please check your email account for the event confirmation email.

Step 2d: If you forgot your password for the Events Registration portal, please click on "Password Reset" to reset your password.

Step 3: For a new user, click on "Request an Account?" link found on the left menu as seen below. (First time to use this event registration page, Please select Request an Account)


ICAO / Event Registration Log-in

[Event Registration Log-in](#)
[Request an Account](#)
[Password Reset](#)

Event Registration Log-in

☒ **This is a public or shared device**
Select this option if you are on a public or shared device. Be sure to sign out when you have finished and close all windows to end your session.

☐ **This is a private device**
Select this option if you are the only person who uses this device. The service will allow a longer period of inactivity before signing you out.

☐ I'm not a robot 

Logon

Step 3a: Input your email address, to check if your details are in the system.

Meetings and Events > Online Registration > Online Registration

[Meetings & Events](#)
[Frequently Asked Questions](#)
[My Events](#)

Online Registration

Existing user? Please login [here](#).

We would like to verify if your email address already exists in the system.

Verify email address

Step 3b: Select Proceed to new Registration

Meetings and Events > Online Registration > Online Registration

Meetings & Events
Frequently Asked Questions
My Events

APAC Regional Webinar on Economic Impact of COVID-19 on Civil Aviation and the Financial Alleviation Measures

Thursday, August 13, 2020 12:00 PM – Thursday, August 13, 2020 3:00 PM

Event Address: ICAO Asia & Pacific Regional Sub-Office (APAC RSO) Beijing, China

Online Registration

Existing user? Please login [here](#).

Fields with an * are mandatory

Personal Information

*Salutation

*Picture No file selected.

*First Name

*Last Name

*E-Mail

Phone

*Organization

*Job Title

*Industry Type

Information

We could not find your information with us.

Please click on "Proceed to a new registration" to continue the registration process.

Step 3c: Complete the remaining required fields click Next and "Register Now".

Meetings & Events
Frequently Asked Questions
My Events

APAC Regional Webinar on Economic Impact of COVID-19 on Civil Aviation and the Financial Alleviation Measures

Thursday, August 13, 2020 12:00 PM – Thursday, August 13, 2020 3:00 PM

Event Address: ICAO Asia & Pacific Regional Sub-Office (APAC RSO) Beijing, China

Online Registration

Existing user? Please login [here](#).

Fields with an * are mandatory

Personal Information

*Salutation

*Picture No file selected.

*First Name

*Last Name

*E-Mail

Phone

*Organization

*Job Title

*Industry Type

*Area of activity

Step 3d: Please check your email account for the event confirmation email.

Step 4: You can reset your password by clicking on "Password Reset"

If you forgot your password, then select the Password reset link found on the Left menu of this page, input your email address then click Reset and a link will be sent with a new password which you can use to login