

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**



**REPORT  
OF THE SECOND MEETING OF THE  
ASIA AND PACIFIC (APAC) AIR NAVIGATION SERVICE PROVIDER (ANSP)  
COMMITTEE  
(AAC/2)**

Singapore, 22 – 23 October 2023

The views expressed in this Report are those of the Meeting  
and not the Organization

Approved by the Meeting  
and published by the ICAO Asia and Pacific Office, Bangkok

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## **INTRODUCTION**

### **Meeting**

1.1 The Second Meeting of the APAC ANSP COMMITTEE (AAC/2) was held in Singapore, on 22-23 October 2023. The meeting was also coincided with the ICAO Air Navigation World 2023 – ATM Procedures for Today event scheduled from 23 to 27 October 2023 at the same venue in Singapore.

1.2 The AAC/2 meeting was divided into two-day session. On the first day, all four work streams held discussions in parallel, while the full committee meeting was conducted on the second day.

### **Attendance**

2.1 The meeting was attended by sixty eight (68) participants from Australia, China, Hong Kong China, Macao China, France, India, Japan, New Zealand, Papua New Guinea, Philippines, Singapore, Thailand, United States of America, Vietnam, CANSO, IATA, and ICAO.

2.2 A list of participants is appended at **Appendix A** to this report.

### **Officers and Regional Office**

3.1 In the absence of Mr. Raphael Guillet, Chief of ICAO APAC RSO, Mr. Xu Zhi Feng, ICAO APAC ATM Officer, acted as the Secretary for the Meeting, assisted by the staff from Civil Aviation Authority of Singapore (CAAS) and Ms. Yang SiQi from ICAO APAC RSO.

### **Documentation and Working Language**

5.1 The working language of the meeting and all documentation was English, inclusive of all documentation and this Report. The meeting documentation is available at the ICAO APAC Office website: <https://www.icao.int/APAC/Meetings/Pages/2023-AAC-2.aspx>

## REPORT ON AGENDA ITEMS

### Agenda Item 1: Opening of the Meeting

1.1 The Chair of APAC ANSP Committee, Mr. HAN Kok Juan, Singapore, Civil Aviation Authority of Singapore (CAAS), Director General opened the meeting; and with the Vice-Chairs: Mr. Nopasit CHAKPITAK, Thailand, AEROTHAI, President; Mr. MIAO Xuan, China, Air Traffic Management Bureau (ATMB) of Civil Aviation Authority of China (CAAC), Deputy Director General; Mr. Marc HOUALLA, France, French Polynesia, Director of the French Polynesia Civil Aviation Services and Mr. Poh Theen SOH, CANSO, Director Asia Pacific Affairs, welcomed the participants to the meeting.

1.2 The ICAO APAC Regional Director, Mr. MA Tao, provided opening remarks and welcomed all participants to the Meeting.

#### Adoption of the Agenda

1.3 The meeting adopted the Agenda as shown below:

Agenda Item 1: Opening of the meeting and working arrangements

Agenda Item 2: Outcomes of the DGCA58 Conference

Agenda Item 3: Work Program

*a: Discussion on Working Papers*

*b: Outcomes of Workstreams discussion*

Agenda Item 4: Any other business

Agenda Item 5: Next meeting

Agenda Item 6: Conversation with ICAO

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### Agenda Item 2: Outcomes of the DGCA58 Conference

#### Presentation on the Key Outcomes of the DGCA58 Conference (SP04, Secretariat)

2.1 The Secretariat presented the key outcomes related of the DGCA/58 to the meeting. The three relevant Discussion Papers (DP) and their subsequent Action Items assigned by the DGCA were reported to the APAC ANSP Committee for further action.

2.2 The progress of the work of the APAC ANSP Committee was reported to DGCA58 (DP/9b/06 of DGCA/58) on behalf of the Chair, Vice-Chairs, and Work Stream (WS) leads. The comment from DGCA to APAC ANSP Committee for the corresponding action is extracted below:

*DGCA58/47: Noting the progress of the work of the APAC ANSP Committee, the Conference encouraged States/Administrations to support their ANSPs in contributing towards the work of the APAC ANSP Committee towards the realisation of the planned deliverables and encourage their ANSPs to actively participate in the APAC ANSP Committee.*

2.3 *DP/4/01 of DGCA/58: Need for ANS Training Support to Deal with Upcoming ATM Infrastructure Development with CNS-ATM Automation System* was presented by Bangladesh. Through the paper, Bangladesh reached out to competent States to sponsor and facilitate ANS-related training courses to be offered. The comment from DGCA to APAC ANSP Committee for the corresponding action is extracted below:

*The Conference:*

*a) Encouraged States/Administrations and industry organisations to continue collaborating and developing new and relevant training programs for ANS Personnel; and*

*b) Invited the APAC ANSP Committee (AAC) to consider developing strategies for collaborative support for ANS training.*

2.4 Through the *DP/4/02 of DGCA/58*, the conference was introduced by CANSO for its Operational Information System (OIS) for sharing ATM and other ANS-related contingency information. The comment from DGCA to the APAC ANSP Committee for the corresponding action is extracted below:

*To further support the implementation of ATM contingency planning (DGCA/57 Action Item 57/19), the Conference encouraged States/Administrations to:*

*a) Consider the CANSO Operational Information System (OIS) for sharing ATM and other ANS-related contingency information; and*

*b) Participate in contingency exercises conducted by the Asia/Pacific ANSP Committee to test contingency information exchange and coordinated contingency responses.*

2.5 The meeting acknowledged the comments by the DGCA conference and urged the relevant Work Streams to consider necessary follow-up actions.

2.6 Each WS had new members joining at this meeting:

- India indicated it would join all four WS and volunteered to serve as a co-lead of WS4.
- Macao China indicated it would join WS1.
- USA indicated it would join WS2 and volunteered to serve as a co-lead.
- Vietnam indicated it would join WS1 and WS2.

The ANSPs were invited to provide the name, designation and email addresses of their nominated members joining the WS to the Secretariat at [zxuu@icao.int](mailto:zxuu@icao.int). Accordingly, the list of *Members of Work Streams of APAC ANSP Committee* has been updated and is appended to **Appendix B** of this report. The SharePoint file will be updated accordingly and access can be given by sending a request to [zxuu@icao.int](mailto:zxuu@icao.int).

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### **Agenda Item 3: Work Program**

#### **a) Discussion on Working Papers**

*The Collaboration Plan to Step up ANS Capacity and Capabilities (WP01, China and*

Singapore)

3.1 The paper presented the Collaboration Plan drafted by WS1, which aimed to develop an Asia Pacific ATM technology collaboration framework for collaboration on capacity building and technical assistance, which can include training and scheme for secondment or attachment of subject matter experts among ANSPs.

Uniting the Strength of Innovation for Building a Seamless Sky the Asia Pacific Region Innovation & Capacity Building Symposium 2023 (APICS 2023) (WP02, Hong Kong, China)

3.2 Hong Kong China introduced the Asia Pacific Region Innovation & Capacity Building Symposium (APICS 2023), which China and Hong Kong, China initiated, supported by the ICAO Regional Office. The event is jointly organized by the Civil Aviation Administration of China (CAAC), the Civil Aviation Department of Hong Kong, China (HKCAD) and the Hong Kong International Aviation Academy (HKIAA). The event aims to support the ICAO core strategy in innovation and global initiatives in capacity building.

3.3 It was also mentioned that the APICS 2023 would be convened between the upcoming APANPIRG/34 and RASG-APAC/13 meetings in Hong Kong, China. Hong Kong China encouraged States/Administrations and interested organizations/companies to attend and/or exhibit in the Symposium.

Presentation on the International Centre for Aviation Innovation (ICAI) (SP03, Singapore)

3.4 The meeting was informed on the role and functions of ICAI as an international-oriented centre to foster partnerships with global aviation stakeholders to undertake research and innovation together so as to address system-wide challenges in the region due to airport and airspace constraints, integration of Unmanned Aircraft Systems, decarbonization of air travel and development of smart airports.

**b) Outcomes of Work Stream (WS) discussion**Outcomes of WS 1 (SP05, WS 1 leads)

3.5 WS 1 drafted nine (9) tasks which had been approved in the online APAC ANSP Committee meeting on June 15<sup>th</sup>. Nine (9) tasks have been carried out according to the schedule as listed below:

- Task 1 was completed;
- Tasks 2, 3 and 5 were ongoing; and
- Task 6: The Asia Pacific Region Innovation and Capacity Building Symposium would be held by Hong Kong, China in December 2023.

3.6 The meeting was reminded that the deadline for response to Survey on Capacity Building And System Modernisation Plans And Challenges (Task 5) was extended to 31 Dec 2023, ANSPs were urged to promptly respond to the survey for more accurate identification of the possible collaboration areas.

Outcomes of WS 2 (SP06, WS 2 leads)

3.7 The items discussed were:

- Seamless ANS – Survey on implementation challenges faced by APAC ANSPs;
- ATFM – Asia-Pacific Multi-Nodal ATFM Collaboration (AMNAC); and
- TBO – APAC TBO Pathfinder Project.

3.8 The meeting noted the preliminary analysis of survey results by WS 2. The meeting agreed with the proposal by WS 2 to extend the survey submission deadline to 31 Dec 2023 to align with WS 1.5. ANSPs were urged to respond to the survey for more accurate identification of the possible collaboration areas.

3.9 Regarding the sharing on Asia-Pacific Multi-Nodal ATFM Collaboration (AMNAC), the meeting reviewed the work plan and activities of the ATFM/SG. The meeting recognised while a high percentage of Calculated Take-Off Time (CTOT) compliance was observed from Level 3 nodes, ANSPs were facing a number of challenges. There is a need to foster collaboration and incentivise ANSPs to level up their participation to Level 3 to better address demand capacity imbalance.

3.10 The meeting welcomed ANSPs to join the APAC TBO Pathfinder Project as participants or observers and reminded that observers also needed to have the required capability for information exchange. The meeting noted the next steps for WS 2 to work with project participants and observers through the APAC TBO Pathfinder Project to progress the TBO concept in the APAC region.

Outcomes of WS 3 (SP07, WS 3 leads)

3.11 WS 3 discussed the information-sharing platforms for managing contingency operations and the connectivity to ICAO CCT activities. The related topics were presented by:

- CAAM – Operational Contingency Plan Table-Top Exercise;
- JCAB – Contingency Plan “How To” document for the region;
- FAA ATO – CANSO Operational Information System.

3.12 The meeting noted that WS 3 had completed the deliverable on “Review and provide recommended edits for the regional guidance material (APAC Regional ATM Contingency Plan) on baseline operational contingency procedures as necessary”.

3.13 The meeting noted the next steps for WS 3 to focus on the following priority areas:

- Populate regional contingency point of contact list.
  - Phase 1 – Proof of concept (Completed)
  - Phase 2 – Expansion to other Operational Personnel and/or ICAO ATM Contact list
- Finalise contingency “How To” document.
- Determine modality for contingency information sharing.
- Contingency Planning Workshop.
  - Jan 29 – Feb 2, 2024 (Hosted by CAA Singapore)
- Conduct contingency exercises.
  - Identify and address any remaining gaps
  - Finalise WS 3 activities prior to DGCA/59

Outcomes of WS 4 (SP08, WS 4 leads)

3.14 The action items discussed under WS 4 were listed as follows:

- Item 1: Implementation of free route airspace (FRA);
- Item 2: Implementation of Continuous Climb and Descent Operations ;
- Item 3: Development of ATM system interoperability;
- Item 4: SEAC (French Polynesia) Development of contingency plans amongst ANSPs; and
- Item 5: Utilising space-based ADS-B /Very High Frequency (ADS-B/VHF).

3.15 India volunteered to join the WS4 as Co-Leads with Philippines, IATA and France. In particular, they volunteered to be in charge of item 2: Implementation of Continuous Climb and Descent Operations (CCO and CDO) and item 5: Utilising space-based Automatic Dependent Surveillance-Broadcast/Very High.

3.16 To identify applicable city pairs and flights and validate the use of Free Route Operations (FRT0) between defined cities, five signatories from WS 4 comprising the ANSPs from Indonesia, New Zealand, and Singapore, CANSO, and IATA signed an agreement on the South-East Asia – Oceanic Implementation of FRT0 Project.

3.17 Regarding the item 3: Development of ATM system interoperability, the following actions have been agreed:

- A: First comments on the draft document on interoperability\_V0.1 by the end of November;
- B: Taking into account the APANPIRG work on this topic;
- C: Liaison with some ATM systems manufacturers; and
- D: Next meeting by mid-January.

3.18 For item 4: Development of contingency plans amongst ANSPs, it has been decided to liaise with our colleagues of WS3 in charge of the development of contingency plans. After a discussion with the leads of WS3, USA and Japan, WS4 members are considering transferring the WS4 item 4 activity to the WS3.

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**Agenda Item 4: Any Other Business**

4.1 Nothing to report.

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**Agenda Item 5: Next Meeting**

5.1 The meeting agreed that each WS should keep going on the online discussion. In addition, an online meeting would be arranged by the Secretariat in February, for Chair/vice-chair & WS leads

to discuss and synchronise the program's progress.

5.2 The time and venue for the next in-person meeting have yet to be determined.

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#### **Agenda Item 6: Conversation with ICAO**

6.1 Agenda Item 6 involved the head of each delegation and the leads of each WS of the APAC ANSP Committee. Mr. Salazar Juan Carlos, ICAO Secretary General; Mr. Padhraic Kelleher, President of Air Navigation Commission (ANC); Ms. Merkle Michele, Director of ICAO Air Navigation Bureau (ANB); Mr. Tao Ma, APAC Regional Director; Mr. Christopher Dalton, Chief AMO-ATM section, ICAO Air Navigation Bureau; and Mr. Stephen Creamer, Special Advisor to ICAO Secretary General, from ICAO joint AAC/2 for Agenda Item 6.

6.2 Moderated by the Chair of the APAC ANSP Committee, Mr. HAN Kok Juan, the session covered a broad range of topics which included sharing by respective WS Leads on their areas of priority and the work programme of each WS, as well as discussions on developments at ICAO that would support the implementation of regional ANS initiatives.

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APPENDIX A

**The Second Meeting of the Asia and Pacific ANSP Committee**

**(AAC/2)**

**List of Participants**

NAME		TITLE/ADMINISTRATION
<b>1. AUSTRALIA</b>		
1.	Mr. Steve Barry	Risk Intelligence Lead Airservices Australia
<b>2. CHINA</b>		
2.	Mr. Xuan Miao	Deputy Director General, ATMB of CAAC
3.	Mr. Fang Tian	Director, International Cooperation Division, ATMB of CAAC
4.	Ms. Ying Zhang	Director, Planning & Research office, Airspace Management Center, ATMB of CAAC
5.	Ms. Yulan Xie	Deputy Director General, North China Regional ATMB of CAAC
<b>3. HONG KONG, CHINA</b>		
6.	Mr. Gabriel Po Keung Cheng	Chief Air Traffic Control Officer Civil Aviation Department Hong Kong
7.	Mr. Anfernee Poon	Senior Operations Officer (Strategic Planning) Civil Aviation Department Hong Kong
8.	Mr. Vincent Wong	Acting Chief Electronics Engineers (Technical Support) Civil Aviation Department Hong Kong
<b>4. INDIA</b>		
9.	Mr. M Suresh	Member (ANS) AAI
10.	Mr. Rakesh Bhatnagar	General Manager (ATM) AAI
11.	Mr. Soundara Rajan	General Manager (CNS) AAI

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<b>5. MACAO, CHINA</b>		
12. Mr. Gaohong Hu	Senior Head of ATS Division CAM - Macau International Airport Co. Ltd.	
<b>6. FRANCE</b>		
13. Mr. Marc HOUALLA	Directeur Service d'Etat de l'aviation civile en Polynésie française	
<b>7. JAPAN</b>		
14. Mr. Shoji Yoshida	Director-General Japan Civil Aviation Bureau	
15. Mr. Takayuki Harada	Director, Air Traffic International Affairs Office, ANS Department Japan Civil Aviation Bureau	
16. Mr. Yukio Imada	Special assistant to the Director Japan Civil Aviation Bureau	
17. Ms. Kyoko Sato	Special Assistant of the Director, Air Navigation Services Planning Office, Air Traffic International Affairs Office, Air Navigation Services Planning Division, Air Navigation Services Department, Civil Aviation Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Government of Japan (MLIT)	
<b>8. NEW ZEALAND</b>		
18. Mr. Johl Steel-Brown	Manager Strategic Air Traffic Services & Acting Head of Standards and Performance Airways New Zealand	
<b>9. PHILIPPINES</b>		
19. Mr. Alex Balde	Acting Chief, ANS Civil Aviation Authority of the Philippines	
<b>10. SINGAPORE</b>		
20. Mr. Han Kok Juan	Director-General, Civil Aviation Authority of Singapore	
21. Mr. Ng Tee Chiou	Deputy Director-General	

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	Civil Aviation Authority of Singapore
22. Mr. Tan Yean Guan	Director (Air Traffic Management Plans & Development) Civil Aviation Authority of Singapore
23. Mr. Ho Wei Sean	Deputy Director (Air Traffic Management Integration & Capability Experimentation) Civil Aviation Authority of Singapore
24. Mr. Chan Tai Khoon	Deputy Director (Air Navigation Systems Programme Office) Civil Aviation Authority of Singapore
25. Mr. Teo Tian Hong	Senior Chief (Air Traffic Management) Civil Aviation Authority of Singapore
26. Mr. Ng Han Sheng Joel	Chief (Air Traffic Management-2) Civil Aviation Authority of Singapore
27. Mr. Tan Kah Han	Chief Technology Officer Civil Aviation Authority of Singapore
28. Mr. Wee Wei Tat	Deputy Director (Technology Office) Civil Aviation Authority of Singapore
29. Mr. Paul Tan	Deputy Director (Programme Management, Technology Office) Civil Aviation Authority of Singapore
30. Mr. Justus Goh	Assistant Director (Technology Office) Civil Aviation Authority of Singapore
31. Mr. Patrick Ky	Authority Member Civil Aviation Authority of Singapore
32. Mr. Foo Kaiyu	Head (Programme Integration) Civil Aviation Authority of Singapore
33. Mr. Tho Zhee Loong	Senior Air Traffic Control Manager (Capability Experimentation) Civil Aviation Authority of Singapore

**11. THAILAND**

34. Mr. Buntoeng Megchai	Manager of Air Navigation Operations Management Department The Civil Aviation Authority of Thailand (CAAT)
35. Mr. Napatra Chuepan	Officer The Civil Aviation Authority of Thailand (CAAT)

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36. Mr. Sikarate Tarasak	Officer The Civil Aviation Authority of Thailand (CAAT)
37. Mr. Chavalit Ithiapa	ANS Senior Officer The Civil Aviation Authority of Thailand (CAAT)
38. Ms. Achiraya Dechanuntasin	Air Traffic Standards Division Officer The Civil Aviation Authority of Thailand (CAAT)
39. Mr. Nopasit Chakpitak	President AEROTHAI, Aeronautical Radio of Thailand Ltd.
40. Mr. Sunun Nimfuk	Vice President (Air Traffic Management) AEROTHAI, Aeronautical Radio of Thailand Ltd.
41. Mr. Thongchai Jamphatippong	Senior Director, Bangkok Area Air Traffic Control Management Bureau AEROTHAI, Aeronautical Radio of Thailand Ltd.
42. Mr. Chanyoot Janprasong	Senior Director, Air Traffic Services Engineering Bureau AEROTHAI, Aeronautical Radio of Thailand Ltd.
43. Mr. Chanyut Phrukkumwong	Director, Air Traffic Services Engineering Bureau Research and Development Department AEROTHAI, Aeronautical Radio of Thailand Ltd.
44. Ms. Puntaree Suwan	Corporate Relations Assistant Manager AEROTHAI, Aeronautical Radio of Thailand Ltd.
45. Mr. Piyawut Tantimekabut	Air Traffic Management Network Manager, AEROTHAI, Aeronautical Radio of Thailand
46. Ms. Amornrat Jirattigalachote	Strategic Planning Manager (Engineering) AEROTHAI, Aeronautical Radio of Thailand
47. Mr. Sakon Sinlapakun	Senior Air Traffic Systems Engineer AEROTHAI, Aeronautical Radio of Thailand Ltd.
48. Mr. Arthit Tosukolvan	Engineer AEROTHAI, Aeronautical Radio of Thailand Ltd.
49. Mr. Worapong Jirojkul	Senior Air Traffic Systems Engineer AEROTHAI, Aeronautical Radio of Thailand Ltd.
50. Mr. Chayaphol Srivilas	Air Traffic Controller 2 (Provincial Aerodrome Control) AEROTHAI, Aeronautical Radio of Thailand Ltd.

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<b>12. UNITED STATES</b>		
51. Ms. Almira Ramadani		Senior ATO Representative for APAC Federal Aviation Administration(FAA)
52. Mr. Shayne Campbell		Senior Air Traffic Representative Asia Pacific Federal Aviation Administration(FAA)
53. Ms. Jessica Sypniewski		Deputy Assistant Administrator for NextGen Federal Aviation Administration(FAA)
<b>13. VIET NAM</b>		
54. Mr. Ho Sy Tung		DDG of VATM Viet Nam Air Traffic Management Corporation
55. Mr. Pham Huu Son		Deputy Director of Technical Dept. Viet Nam Air Traffic Management Corporation
56. Mr. Nguyen Trung Kien		Chief of ASM group, ATS Dept. VATM Viet Nam Air Traffic Management Corporation
<b>14. CIVIL AIR NAVIGATION SERVICES ORGANIZATION (CANSO)</b>		
57. Mr. Poh Theen Soh		Director, Asia Pacific Affairs CANSO
58. Ms. Juliana Goh		Technical Consultant
<b>15. IATA</b>		
59. Mr. Blair Cowles		Regional Director Safety and Flight Operations Asia-Pacific IATA
<b>16. ICAO</b>		
60. Mr. Salazar Juan Carlos		Secretary General
61. Mr. Padhraic Kelleher		President of Air Navigation Commission (ANC)
62. Ms. Merkle Michele		Director of Air Navigation Bureau (ANB)
63. Mr. Christopher Dalton		Chief AMO,ATM section, ICAO Air Navigation Bureau
64. Mr. Stephen Creamer		Special Advisor to ICAO Secretary General

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65. Mr. Tao Ma	APAC Regional Director
66. Mr. Xu Zhi Feng	APAC Regional Officer, Air Traffic Management
67. Mr. Hyuk Jin Kwon	APAC Regional Officer, Air Traffic Management
68. Ms. Siqi Yang	APAC RSO Associate Administrative Officer

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**The Second Meeting of the Asia and Pacific ANSP Committee**

(AAC/2)

**Members of Work Streams of APAC ANSP Committee**

Work Steam 1	Work Steam 2	Work Steam 3	Work Steam 4
China (Lead)	Hong Kong China (Lead)	Japan (Lead)	France (French Polynesia) (Lead)
Thailand (Lead)	Singapore (Lead)	Malaysia (Lead)	Philippines (Lead)
Hong Kong China	Thailand (Lead)	USA (Lead)	IATA (Lead)
Macao China	USA (Lead)	China	India (Lead)
India	Cambodia	Hong Kong China	China
New Zealand	China	India	Indonesia
Singapore	India	Indonesia	Japan
Viet Nam	Indonesia	Maldives	New Zealand
CANSO	Malaysia	Mongolia	Papua New Guinea
	Mongolia	New Zealand	Singapore
	New Zealand	Republic of Korea	Thailand
	Viet Nam	Singapore	USA
	ACI	Thailand	CANSO
	CANSO	CANSO	
	IATA	IFATCA	