



ICAO

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Agenda Item 3: Status of implementation plan focusing those connections identified with priorities

AIDC IMPLEMENTATION IN MALAYSIA

(Presented by Malaysia)

SUMMARY

This paper reports on the progress of AIDC implementation plan in Malaysia (Kuala Lumpur, Kota Kinabalu and Kuching ACC).

1. INTRODUCTION

1.1 Malaysia has two Flight Information Regions (FIRs), Kuala Lumpur FIR and Kota Kinabalu FIR. Kuala Lumpur FIR is adjacent with 5 FIRs (i.e. Chennai, Singapore, Bangkok, Jakarta, and Ho Chi Minh FIR), whereas Kota Kinabalu FIR is adjacent with 4 FIRs. (i.e. Jakarta, Manila, Singapore, and Ujung Pandang FIR).

1.2 As present, Kuala Lumpur ACC has commenced AIDC operational implementation with Singapore, Bangkok, and Chennai OCC.

1.3 This paper aims to share the progress and status of AIDC implementation in Malaysia.

2. DISCUSSION

2.1 AIDC Implementation in Kuala Lumpur FIR

2.1.1 Kuala Lumpur ACC and Chennai OCC

2.1.1.1 The AIDC operational implementation between Kuala Lumpur ACC and Chennai OCC came into effect on the 1st April 2020. The AIDC messages included for exchange are ABI, EST, ACP, LAM, LRM, CDN, REJ and MAC.

2.1.1.2 The AIDC operational trial for TOC and AOC messages between Kuala Lumpur ACC and Chennai OCC is ongoing, starting from 1st July 2020 and ends on 1st August 2020.

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2.1.1.3 The sample of statistic for ACP success rate of random (one) week in the month of January to May 2020 is given below:

	January (6th-12th)	February (3rd-9th)	March (16th-22nd)	April	May (22nd-28th)
EST	1272	1287	756	-	274
CDN	243	246	144	-	114
CDN + EST	1515	1533	900	-	331
ACP (CDN+EST)	1372	1373	799	-	280
ACP SUCCESS RATE	91%	90%	89%	-	85%

*Note: In April 2020, AIDC was suspended due to the delay on making the AIDC address change due to the Covid-19 pandemic.

2.1.1.4 Overall, the ACP success rate is satisfactory except in the month of May during which the success rate is observed to be slightly low due to the low traffic volume during the Covid-19 pandemic period. (i.e. Low number of traffic volume, EST serves as the denominator of the equation, number of success ACP serves as nominator of the equation will significantly affect the result of the overall ACP Success Rate). The ACP success rate reflects system as well as ATC responses as agreed in AIDC Memorandum of Understanding. ACP derives from EST automatically whereas CDN is a manual order issued by ATC.

2.1.1.5 The main attributes for ACP failures are:

- i. AFTN/Media failure
- ii. Late response by ATCs for CDN messages.
- iii. Attempt to send CDN message when the flight is close/approaching the Coordination Point (COP).

2.1.2 Kuala Lumpur ACC and Singapore ACC

2.1.2.1 Kuala Lumpur ACC and Singapore ACC started the AIDC operational implementation on 1st November 2019. The AIDC messages included for exchange are EST, ACP, LAM, and LRM.

2.1.2.2 The statistic of random (one) week in the month of January to May 2020 for ACP success rate are as follows:

	January (6th-12th)	February (3rd-9th)	March (16th-22nd)	April (13th-19th)	May (11th-17th)
EST	3530	3489	1624	289	297
ACP	3372	3308	1569	271	274
ACP SUCCESS RATE	96%	95%	97%	94%	92%

2.1.2.3 Overall, the ACP success rate is very good. However, a few ACP failures have occurred due to:

- i. Media failure
- ii. Incorrect or missing system flight plan.

2.1.2.4 Lumpur ACC and Singapore ACC has conducted successful technical test on ABI, CDN and REJ on 10th Dec 2019. Further discussion on future implementation on these messages between both ACCs will be discussed in the future.

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2.1.3 Kuala Lumpur ACC and Bangkok ACC

2.1.3.1 The AIDC operational implementation between Lumpur ACC and Bangkok ACC came into effect on 14th March 2020. The AIDC messages included for exchange are EST, ACP, LAM and LRM.

2.1.3.2 The sampled statistic of random (one) week in the month of February to May 2020 for ACP success rate are as follows:

	February (11th-17th)	March (16th-22nd)	April (13th-19th)	May (11th-17th)
EST	2431	1063	116	195
ACP	2214	1016	97	154
ACP SUCCESS RATE	91%	96%	84%*	79%*

2.1.3.3 The overall ACP success rate is good except for the month of April and May during which the success rate was observed to be declining in percentage. One of the factors may be attributed by low traffic volume due to Covid-19 pandemic. (i.e. Low number of traffic volume, EST serves as the denominator of the equation, number of success ACP serves as nominator of the equation will significantly affect the result of ACP Success Rate).

2.1.3.4 The other factors that contribute to ACP failures are:

- i. Media failure
- ii. Incorrect or missing system flight plan (i.e. Controller familiarization towards new Coordination Point (COP) implementation which might cause the incorrect flight data entry in the system; and system flight plan overdue).

2.1.3.5 Lumpur ACC and Bangkok ACC conducted successful technical test on CDN, TOC and AOC latest on 11th Mar 2019. Further discussion on future implementation on these messages between both ACCs will be discussed.

2.1.3.6 For ABI message, both ACCs have identified some issues during the technical test. The discussion between both ACCs to address those issues are still on-going.

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2.1.4 Summary (Kuala Lumpur ACC and Adjacent ACC)

STATE/ ATC UNIT	Technical Test	Operational Trial	Operational Implementation	Messages included	Remark
India/ Chennai ACC	31 st Jul 2013	Phase 1 26 th Sep 2016 Phase 2 1 st July 2020 -1 st August 2020	1 st Apr 2020	ABI/EST/ LAM/CDN/ ACP/REJ/ LRM/MAC	Operational Trial Phase 1 ABI/EST/LAM/ACP/ CDN/REJ/LRM/MAC Phase 2 TOC/AOC
Singapore/ Singapore ACC	13 th Apr 2015	4 th Sep 2018	1 st Nov 2019	EST/LAM/ ACP/LRM	Technical Test Successful ABI/CDN/REJ
Thailand/ Bangkok ACC	3 rd Nov 2016	1st Trial 29 th - 31 st Aug 2019 2nd Trial 4 th Feb 2020	14 th Mar 2020	EST/LAM/ ACP/LRM	Technical Test i. Successful CDN/TOC/ AOC ii. Unsuccessful ABI Operational Trial 1 st trial was discontinued due to operational requirement.
Vietnam/ Ho Chi Minh ACC	4Q2019	2Q2020	1Q2021	Nil	TBD
Indonesia/ Jakarta ACC	4Q2020	TBD	TBD	Nil	Planned

*TBD – To be discussed

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2.2 AIDC Implementation in Kota Kinabalu FIR

2.2.1 Kota Kinabalu and Kuching has done several technical tests with their adjacent ACCs.

2.2.2 Summary (Kota Kinabalu FIR and Adjacent FIR)

<i>STATE/ ATC UNIT</i>	Technical Test	Operational Trial	Operational Implementation	Messages included
Kota Kinabalu				
<i>Indonesia/ Ujung Pandang ACC</i>	7 th -8 th Aug 2019	4Q2020	1Q2021	EST/LAM/ ACP/LRM
	23 rd Oct 2019			
	11 th Mar 2019			
<i>Indonesia/ Jakarta ACC</i>	3Q2021	3Q2021	3Q2021	Nil
<i>Singapore/ Singapore ACC</i>	18 th -19 th Nov 2019	Oct 2020	1Q2021	EST/LAM/ ACP/LRM
	16 th Jan 2020			
<i>Philippine/ Manila ACC</i>	21 st -22 nd May 2019	4Q2020	1Q2021	EST/LAM/ ACP/LRM
	21 st -22 nd Oct 2019			
Kuching				
<i>Singapore/ Singapore ACC</i>	20 th -21 st Nov 2019	20 th Jul – 18 th Oct 2020	4Q2020	EST/LAM/ ACP/LRM
	14 th Jan 2020			

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matter as appropriate
