CNS/MET SG/14-**IP/25**
Agenda Item 4 (3)
19/07/10

International Civil Aviation Organization

FOURTEENTH MEETING OF THE COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND METEOROLOGY SUB-GROUP OF APANPIRG (CNS/MET SG/14)

Jakarta, Indonesia, 19 – 22 July 2010

Agenda Item 4: **Aeronautical Mobile Service (AMS):**

3) other AMS related issues

UPDATE STATUS THE COMMUNICATION IMPLEMENTATION IN INDONESIA

(Presented by Indonesia)

SUMMARY

This information paper is to describe and propose updating communication implementation for the ADS-C/CPDLC in Ujung Pandang FIR.

This paper relates to

Strategic Objectives:
A: Safety – Enhance global civil aviation safety
C: Environmental Protection – Minimize the adverse effect of global civil aviation on the environment
D: Efficiency – Enhance the efficiency of aviation operations
E: Continuity – Maintain the continuity of aviation operations
Global Plan Initiatives:
All

1. Introduction/Background

1.1 During the meeting of ATM/AIS/SAR/SG/20 in Singapore, 5-9 July 2010, Indonesia reported the Result of the ADS/CPDLC Operational Trial and the Proposed Plan for Transition from the Trial to the Operational Implementation in the Ujung Pandang FIR (IP-16, enclosed)

1.2 The ADS-C/CPDLC trial that started in July 2008 can work properly to meet the requirement, as mention in the FOM. This ADS-C/CPDLC trial will be finish on September 2010 and continue to operational implementation.

2. Discussion

2.1 With this information paper, Indonesia propose to update status of ADS-C/CPDLC implementation in Ujung Pandang FIR and to be revise into the CNS/ATM Matrix.

3. Action by the Meeting

3.1 The meeting is invited to note the information in this paper and revise the CNS/ATM Matrix.

– – – – – – – – – – – –

ATTCHMENT A:

CNS/ATM Implementation Planning Matrix

				Navigation					
State/Organization	**ATN G/G Boundary Intermediate System (BIS) Router/AMHS**	**AIDC**	**CPDLC**	**En-route**	**Terminal**	**Approach**	**ADS-B/Multilateration**	**ADS-C**	**Remarks**
INDONESIA	ATN BIS Router and AMHS planned for trial in 2009. Trial with Singapore planned. ATNBIS Router and AMHS are still on going trial with Singapore to be finished in 2010 (Part D: AMHS Commission)	Brisbane and Makassar in planned in June 2009. Makasar and Brisbane is still on going trial AIDC, planned operational in 2011	FANS-1/A. CPDLC in Ujung Pandang FIRs already trial start from 2008 and will be implemented in 2009. FANS-1/A CPDLC in Ujung Pandang FIRs is completely trial operational and will be full operational for designated route on Sept. 2010					FANS 1/A ADS-C trial planned at Jakarta and Ujung Pandang ACC in 2007. FANS-1/A ADS-C in Ujung Pandang FIRs is completely trial operational and will be full operational in September 2010	

ATTACHMENT B:

International Civil Aviation Organization

The Twentieth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group (ATM/AIS/SAR/SG/20)

Singapore, 05 – 09 July 2010

Agenda Item 11: Any other business

Report on the Result of the ADS/CPDLC Operational Trial and the Proposed Plan for Transition from the Trial to the Operational Implementation in the Ujung Pandang FIR

(Presented by Indonesia)

SUMMARY

This information paper presents the result of the ADS/CPDLC operational trial in the Ujung Pandang FIR and the proposal for the transition from the trial to the operational implementation.

1. INTRODUCTION

1.1 To undertake the commitment with ICAO in carrying out, applying components of new CNS/ATM systems and taking into account the progress of the region, Indonesia has conducted the ADS/CPDLC operational trial on particular oceanic ATS routes of A461, B583, B584, B472, B473, B462, R340/R590 in the Ujung Pandang FIR for all aircraft equipped with FANS-1/A. Starting time of the trial was 00.00 UTC on 3 July 2008 with duration of three months. The trial operation period has been extended several times which were notified by NOTAM and the latest period is until 3 June 2010.

1.1.1 At the first year of the trial, some problems were recognized such as ATC system problem; network connection failure; AIDC problem, etc.

1.2 All the problem mentioned above is solved by the 2009 with the upgraded the ATC System and beneficial outcomes of the bilateral coordination between Indonesia and Australia (25th AUSINDO Meeting August 2009) took consideration to continue AIDC trial. Some AIDC and ADSC/CPDLC problems had been evaluated and some actions have been taken.

1.3 TOC and AOC betwen Ujung Pandang ACC and Brisbane ACC is being continue in trial operations under new LOA (AUSINDO 26). The automatic EOS can be done and ADSC/CPDLC is running well. The most of international flights ADS/CPDLC equipage logged on and not only on the designated routes (*see the attachment: A*)

2. DISCUSSION

2.2 ***Result of the ADS/CPDLC Operational Trial in the Ujung Pandang FIR*:**

2.2.1 Indonesia started ADS/CPDLC operational trial from 00.00 UTC on 3 July 2008 on. ATS Routes A461, B583, B584, B472, B473, B462, R340/R590 in the oceanic area of the Ujung Pandang FIR.

2.2.2 ADS/CPDLC services are available 24/24 and conducted with all appropriate FANS-1/A equipped aircraft. The detailed procedures for operational trial have been developed basing on the FANS 1/A Operations Manual.

2.2.3 The received flight plan had indicated that the daily number of *international* flights was approximately 200 flights and most of them have *Datalink* equipment.

2.2.4 Uplink/downlink messages: In average, there were 995 messages per day, including:

-96% of downlinked messages having duration of about 1 minute; about 2 minutes for 98% and about 3 minutes for 99.5%.

-91.5% of uplinked messages having duration of about 1 minute; about 2 minutes for 98% and about 3 minutes for 99.15%.

- Success rate: 99.6%.

2.2.5 Generally *Datalink* transfers between Ujung Pandang ACC and Brisbane ACCs have been taking place smoothly.

2.3. Proposed plan for ADS/CPDLC operational implementation in Ujung Pandang FIR:

- Proposed plan, Ujung Pandang airspace will apply ADS/CPDLC separation for all of FANS-1/A equipped aircraft. The concept plan is implementing the ADS/CPDLC on airspace with still keeping the VHF on.
- Indonesia has prepare the AIP Supplement on ADS/CPDLC operation in the Ujung Pandang FIR which it is intended to be published in 29 July 2010 and will be effected on 23rd Sept 2010.
- The Supplementary Letter of Agreement (SLOA) on transfer of ADS/CPDCL between Ujung Pandang ACC and Brisbane ACC will be revised and signed after proposed plan being approved.
- Boeing Company and the MATSC was conduct the Interoperability Test for the designated ATS Routes B472 by simulated aircraft within Ujung Pandang FIR to analyse the ADS/CPDLC performance and the result is satisfactory, formal report will be prepared by Boeing soon (*see: Attachment: B*).
- The Next Data Authority can not be tested because the virtual test was north bound flight while there is no connection yet with the Philippines.

2.4 Conclusion

With the result of the phase trial, Indonesia has recognized that:

- Data link provided by SITA is stable to provide CPDLC and ADS system well.
- Some aircraft, equipped with ADS/CPDLC equipment, when the load communication is high, the international flight logon to conduct the trial while not fly on the ATS Routes trial mentioned.

- Air traffic control transfer coordination between Ujung Pandang ACC and Brisbane ACC is very good and met the ATM requirements.

- After trial operation phase, it's sure that Indonesia has enough conditions to officially implement ADS/CPDLC operation in Ujung Pandang FIR and we recognize that the trial will continue till the AIDC trial with Australia is completed (*see Attachment: C*).

- Indonesia, particularly MATSC has prepared in all aspects of human, operational manual, ATM systems in order to put ADS/CPDLC into operation in Ujung Pandang FIR.

-In General, Indonesia (Makasar Air Traffic Control Center/ MATSC) have conducted the implementation of ADS/ CPDLC operational trial in Ujung Pandang FIR and after about two year, result of the trial was optimistic and met the operational requirement. Indonesia proposes transition from the trial to the operational implementation.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the Indonesia preparation and result of the ADS/CPDLC trial in Ujung Pandang FIR as inform in this paper.

…….

Attachment: A

TRAFFIC SAMPLE DATA OF CPDLC CONECTION ON 6 FEBRUARY 2010

IN UJUNG PANDANG FIR

NO	ACID	ROUTE	TIME LOG ON (UTC)	TIME LOG OUT (UTC)
1	CPA110	R340/A461	1:58:34	4:06:01
2	CPA134	A461	2:07:38	4:15:30
3	SIA220	A576	2:39:11	4:12:33
4	SIA245	A576	3:32:36	5:02:09
5	CAL055	B473	3:35:58	5:53:03
6	CPA139	A461/R340	3:38:33	5:44:08
7	THA456	B583	3:26:37	5:55:59
8	SIA256	A576	4:05:29	6:00:39
9	CPA110	R340/A461	2:19:22	4:08:59
10	EVA316	B473	4:12:12	6:32:49
11	QFA88	B473	4:25:46	6:38:34
12	CPA162	R340/A461	4:29:36	6:39:31
13	CES738	A461	4:30:44	6:39:05
14	CES562	R340/A461	4:33:44	6:46:54
15	QFA30	R590/A461	4:40:40	6:28:05
16	QFA97	R340/A461	4:40:45	5:00:30
17	QFA129	R340/A461	4:42:07	6:47:24
18	CPA785	B584	4:49:06	6:32:09
19	THA451	G464	4:56:11	5:10:53
20	EVA255	B584	5:05:45	7:03:13
21	CPA163	A461	5:06:37	6:13:23
22	CSN326	R340/A461	5:34:08	4:30:06

NO	ACID	ROUTE	TIME LOG ON (UTC)	TIME LOG OUT (UTC)
49	CPA171	B584/G578	10:04:57	12:02:28
50	SIA222	A576	10:19:36	11:30:15
51	QFA1	B583	11:08:14	11:30:14
52	SIA228	A576	11:35:17	12:56:52
53	QFA81	A576	12:00:39	12:44:03
54	QFA31	A576	11:45:32	11:51:06
55	QFA81	A576	12:16:12	12:44:03
56	UAE405	A576	12:17:20	13:28:54
57	QFA5	A576	12:44:03	14:34:47
58	JST35	A576	12:53:14	13:31:12
59	QFA2	A576	13:12:04	15:01:37
60	FDX77	R340/A461	13:12:57	15:31:26
61	CPA111	A461/R340	13:43:04	15:55:28
62	CCA174	R340/A461	13:49:22	16:05:16
63	VIR200	B473	14:00:18	16:26:50
64	QFA52	A576	14:13:45	15:56:09
65	SIA235	A576	14:34:47	15:59:14
66	UAE435	G462	14:40:38	16:31:51
67	ETD455	G462	15:05:30	15:28:26
68	QFA128	B473	15:05:30	17:17:14
69	JST36	A576	15:13:56	15:50:12
70	MAS131	A576	15:20:27	16:34:09

23	SIA238	A576	5:10:01	6:45:12
24	SIA298	A576	5:55:56	7:38:24
25	ETD473	A464	6:18:19	9:06:01
26	CPA102	B473	6:45:20	9:04:11
27	SIA268	A576	6:37:40	8:27:42
28	SIA232	A576	6:54:00	8:29:12
29	HVN780	B583	6:25:25	6:26:09
30	SIA232	A576	6:54:00	8:49:54
31	CAL052	R340/R590	7:08:14	9:09:16
32	QFA127	R340/A461	5:38:17	7:19:06
33	CPA108	B462	7:26:24	9:06:09
34	SQC7293	A576	7:33:00	9:04:58
35	GIA725	R592	7:33:00	10:22:17
36	SIA286	A464	7:36:07	9:09:34
37	MAS130	A464	7:43:16	10:09:31
38	QFA51	A576	8:00:17	9:50:25
39	CPA104	A461	8:31:14	10:39:52
40	CPA100	R340/A461	8:31:45	11:00:20
41	QFA9	A576	8:44:40	12:44:51
42	MAS138	A576	8:47:52	10:22:48
43	MAS148	A576	8:51:39	10:39:37
44	THA458	B583	8:51:39	10:22:21
45	CPA784	B584	9:02:34	10:29:42
46	SIA236	A576	9:03:08	11:22:18
47	THA466	A576	9:09:07	11:11:22
48	MAS122	A576	9:36:01	11:30:14

71	HVN783	B583	16:07:36	18:18:20
72	SQC7295	A464	16:07:36	18:38:14
73	HVN783	B583	16:07:36	18:38:14
74	KAL629	G578	16:08:01	18:12:43
75	ANZ39	B462	16:23:13	18:28:40
76	SQC7295	A464	16:23:13	19:08:55
77	UAE413	G462	16:29:17	18:12:43
78	CSN322	A461	16:29:53	18:30:55
79	CPA161	A461/R340	16:30:13	18:24:08
80	HVN781	B583	16:36:58	19:09:04
81	CPA168	A461	16:38:39	19:56:11
82	THA462	B583	17:06:12	19:48:55
83	MAS140	A464	17:22:03	19:48:11
84	CPA168	A461	17:49:14	19:48:09
85	QFA98	B473	17:49:14	20:16:05
86	QFA9	A576	17:53:16	20:16:05
87	CAL053	B473	17:53:16	21:01:08
88	THA452	B583	18:03:59	20:33:10
89	CAL053	B473	18:06:25	21:01:59
90	MAS146	A576/G462	18:33:47	18:38:14
91	SIA282	A464	18:44:29	21:09:09
92	CPA101	A461/R340	18:44:24	20:55:31
93	SIA231	A576	18:54:12	19:31:35
94	CPA170	R592/B584	19:09:04	21:08:41
95	CPA105	A461	19:31:35	20:30:51
96	UAE433	A464	21:01:08	23:06:02

Source : CPDLC traces file from Eurocat-X at Makassar ATS Centre

Attachment : B

Boeing Air Traffic Services Interoperability Test Procedure

PURPOSE OF TEST

The purpose of this test is a demonstration of the Air Traffic Services (ATS) data link function. This test will demonstrate interoperability of the airborne system with a real data link network and Air Traffic Control system. The test is intended to demonstrate selected exchanges of messages which reflect normal ATS operations.

REFERENCES

(a) RTCA DO-219 - Minimum Operational Performance Standards for ATC Two-Way Data Link Communications

(b) RTCA DO-212 - Minimum Operational Performance Standards for Airborne Automatic Dependent Surveillance Equipment

(c) RTCA DO-258A/EUROCAE ED-100A – Interoperability Requirements for ATS Applications Using ARINC 622 Data Communications

(d) Air Traffic Services Requirements and Objectives Document: _____

(e) ATS Datalink Capabilities Document _____

(f) AC 20-140 - Guidelines for Design Approval of Aircraft Data Communications Systems

TEST PARTICIPANTS

List all test participants:

CONFIGURATION

Date/Time: Airplane

model: VHF Data Radio:

SatCom System: ATC

Configuration Reference: Data

Link Service Provider:

Registration Number: Flight

ID: Departure Station:

Destination Station:

SPECIAL TEST REQUIREMENTS

Identify all special test requirements.

Two different ground stations may be used during these tests. They are:

Gnd1 - the primary facility providing the ground component of the test.
Gnd2 - a Boeing ground address to be used for AFN/CPDLC transfers and testing of multiple ADS contracts. This center is “FMCB/FMCBOCR”

TEST CONDITIONS

Cond.	Origin	Element	Messages	Notes	P/F
	Air	AFN	Logon	Center name of the primary facility = ????	
1	Gnd1	AFN	Logon Acknowledgement		
	Gnd1	163	Connection Request		
	Air	73	Connection Confirm		

Cond.	Origin	Element	Messages	Notes	P/F
	Air	24	REQUEST [routeclearance]		
2	Gnd1	80	CLEARED [routeclearance]	Routeclearance = routeclearance from DM24	
	Air	2	STANDY		
	Air	0	WILCO		

Cond.	Origin	Element	Messages	Notes	P/F
3	Gnd1	ADS	Periodic contract & Event contact	Interval = 10min; aircraft intent = 60min, modulus 1; predicted route = modulus 5; waypoint change	

Cond.	Origin	Element	Messages	Notes	P/F
	Air	11, 66	AT [position] REQUEST CLIMB TO [altitude], DUE TO AIRCRAFT PERFORMANCE	Pos = alt = FL300	
4	Gnd1	19, 22, 129	MAINTAIN [altitude1], AT [position] CLIMB TO AND MAINTAIN [altitude2], REPORT LEVEL [altitude2]	Pos = pos from DM11; alt1 = current alt; alt2 = FL300	
	Air	0	WILCO		
	Air	37	LEVEL [altitude]	Alt = FL300.	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
5	Gnd1	26	CLIMB TO REACH [altitude1] BY [time]	alt1 = FL320; time = current+15min	
	Air	0	WILCO		

Cond.	Origin	Element	Messages	Notes	P/F
6	Gnd1	154	RADAR SERVICES TERMINATED		
	Air	3	ROGER		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
7	Gnd1	123	SQUAWK [code]		
	Air	0	WILCO		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Air	53	WHEN CAN WE EXPECT HIGHER ALTITUDE		
8	Gnd1	7	EXPECT CLIMB AT [time]	time = current+5 min	
	Air	3	ROGER		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Air	9, 18, 66	REQUEST CLIMB TO [altitude], REQUEST [speed], DUE TO AIRCRAFT PERFORMANCE	Alt = FL340; Spd = 0.8M	
	Gnd1	1	STANDBY		
9	Gnd1	141, 135, 134	CONFIRM NEXT WAYPOINT ETA, CONFIRM ASSIGNED LEVEL, CONFIRM SPEED		
	Air	43	NEXT WAYPOINT ETA [time]	Time = current + 15 min	
	Air	38	ASSIGNED LEVEL [level]	Level = FL320	
	Air	34	PRESENT SPEED [speed]	Speed = .75	
	Gnd1	20, 108	CLIMB TO AND MAINTAIN [altitude], MAINTAIN [speed]	Alt = FL340; spd = .75	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
10	Gnd1	ADS	Event contract	altitude ceiling = 34300ft; altitude floor = 33700ft; waypoint change; lateral deviation = 2.25nm	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
11	Gnd1	ADS	Periodic contract	Interval = 15min; predicted route = modulus 1; earth reference = modulus 2	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
12	Gnd1	148	WHEN CAN YOU ACCEPT [altitude]	Alt = FL360	
	Air	67	WE CAN ACCEPT [altitude] AT [time]	Alt = FL360, Time = current + 20min	

Cond.	Origin	Element	Messages	Notes	P/F
14	Gnd1	120	MONITOR [icaounitname] [frequency]	icaounitname = KDEN center Frequency = 119.250	
	Air	0	WILCO		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
14	Gnd1	120	MONITOR [icaounitname] [frequency]	icaounitname = KDEN center Frequency = 119.250	
	Air	0	WILCO		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Air	7	REQUEST BLOCK [altitude1] to [altitude2]	Alt1 = FL360 Alt2 = FL380	
15	Gnd1	31	CLIMB TO AND MAINTAIN BLOCK [altitude1] TO [altitude2], REPORT REACHING BLOCK [altitude1] TO [altitude2]		
	Air	0	WILCO		
	Air	76	REACHING BLOCK [altitude1] TO [altitude2]		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Gnd1	147	REQUEST POSITION REPORT		
17	Air	48, 80	POSITION REPORT [positionreport]; DEVIATING [direction] [distanceoffset] OF ROUTE		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
			REQUEST WEATHER DEVIATION UP TO		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Gnd1	147	REQUEST POSITION REPORT		
17	Air	48, 80	POSITION REPORT [positionreport]; DEVIATING [direction] [distanceoffset] OF ROUTE		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
19	Gnd1	121	AT [position] MONITOR [icaounitname][frequency]	Pos = fixnestplusone from DM48 icaounitname = KSEA center Frequency = 131.50	
	Air	0	WILCO		

Cond.	Origin	Element	Messages	Notes	P/F
	Air	51	WHEN CAN WE EXPECT BACK ON ROUTE		
20	Gnd1	67, 127	PROCEED BACK ON ROUTE, REPORT BACK ON ROUTE		
	Air	0	WILCO		
	Air	41	BACK ON ROUTE		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Air	54	WHEN CAN WE EXPECT CRUISE CLIMB TO [altitude]	Alt = FL370	
21	Gnd1	21	AT [time] CLIMB TO AND MAINTAIN [altitude]	time = current+10min; alt = FL370	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
22	Air	15	REQUEST OFFSET [distanceoffset] [direction] OF ROUTE	Dist = 30 Direction = Left	
	Gnd1	2	REQUEST DEFERRED		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
23	Gnd1	ADS	Event contract	vertical rate = -1000fpm waypoint change; lateral deviation = 2.5nm	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
24	Gnd2	ADS	Demand contract	earth reference; air reference; aircraft intent = 60min	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Air	10	REQUEST DESCENT TO [altitude]	Alt = 5000ft	
25	Gnd1	23, 128	DESCEND TO AND MAINTAIN [altitude1]; REPORT LEAVING [altitude2]	Alt1 = 10000ft (FL100) Alt2 = FL370	
	Air	0	WILCO		
	Air	28	LEAVING [altitude]	Alt = FL370	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Air	22	REQUEST DIRECT TO [position]		
26	Gnd1	74, 118	PROCEED DIRECT TO [position], AT [position] CONTACT [icaounitname][frequency]	Pos = pos in DM22 icaounitname = KLAX center Frequency = 136.75	
	Air	0	WILCO		

Cond. No.	Origin	Element	Messages	Notes	P/F
27	Air	56, 48, 61, 68	MAYDAY MAYDAY MAYDAY; POSITION REPORT; DESCENDING TO [altitude]; [freetext]	[altitude]=14000ft [freetext]=only a test	

	Gnd1	170	[freetext]	[freetext]=roger mayday	
	Air	3	ROGER		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Gnd1	ADS	Periodic contract (emergency mode)		
28	Gnd1	ADS	Cancel all and terminate		
	Air	ADS	Disconnect		
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
29	Gnd2	ADS	Periodic contract (emergency mode)	Interval = 15min; predicted route = modulus 1;	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
	Gnd1	160	NEXT DATA AUTHORITY [icaofacilitydesignation]	Facility = FMCB	
	Gnd1	AFN	Contact Advisory	Next center address (Gnd2) = RTNBOCR	
	Air	AFN	AFN Response	to Gnd1	
30	Air	AFN	AFN Contact	to Gnd2 (FMCB)	
	Gnd2	AFN	Acknowledgement Message	from Gnd2	
	Air	AFN	Complete Message	to Gnd1	
	Gnd2	163	Connect request	from Gnd2 (FMCB)	
	Air	73	Connect confirm	to Gnd2	
Cond.	**Origin**	**Element**	**Messages**	**Notes**	**P/F**
31	Gnd1	117, 161	CONTACT [icaounitname] [frequency]; END SERVICE	Icaounitname = FMCB Center; Freq = 137.000	
	Air	0	WILCO		
	Air	DR1	Disconnect Request		

Attachment : C

TAATS – MATSC AIDC MESSAGE TRIAL 2010

1. INTRODUCTION

Referring to Supplementary Letter of Agreement on the Operational Trial of AIDC (ATS Inter Data Facility Communication) Messaging between Brisbane ATSC and Makassar ATSC, AIDC Trial has been being implemented between the two centers since 16 Desember 2009. The purpose of this trial is to exchange AIDC TOC (Transfer of Control) and AOC (Accept of Control) messages and sending AIDC ABI (Advanced Boundary Information) message from Makassar ATSC to Brisbane ATSC for testing purposes.

Generally, TOC and AOC message exchange runs successfully, both centers are able to response the message according to the specifications.

2. AIDC ABI MESSAGE TEST

AIDC ABI message test from Makassar ATSC to Brisbane ATSC was done successfully, it has added more capability in AIDC messaging between the two centers.

Testing for sending AIDC ABI message from Makassar ATSC to Brisbane ATSC was run on 2, 4, 5, 25 March 2010 and the final test did on 01 April 2010. All Flightplans for this test represent all COP's along the boundary of the two FIR's.

Test results :

- New CRC (Cyclic Redundancy Check) values created by Makassar system for each generated AIDC ABI message.
- Makassar system validating new COP (Coordination Point) for each ABI sending after departure of test flightplan.
- Makassar system generated new ABI message for each UPR along the track.
- In case of block level processing into ABI message, Makassar system only sent UFL (not full block level) in ABI message.
- DOF (Date of Flight) removal was done successfully by Makassar system.
- Capability of Makassar system to process Field 10a up to 25 characters and additional field (IFP/ and RVR/) -not supported by TAAATS.

3. AIDC TOC/AOC MESSAGE EXCHANGES

Generally, TOC/AOC message exchange runs successfully. There was some random error along the trial period (on March 2010) caused by AFTN line failure. It had been fixed by MATSC technical team and since the first week of April 2010 message exchange between the two center runs normally.

4. CONCLUSION

Makassar ATS Centre proposes to continue to two-way AIDC Operational Trial between Brisbane and Makassar ATS Centre starting May – July 2010, including ABI, EST, MAC, TOC, AOC, LAM and LRM.