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**Sixth Meeting of the Asia/Pacific ATS Inter-Facility
Data-Link Communication Implementation Task Force
(APA TF/6) of APANPIRG**

Web-Conference, 14 – 16 July 2020

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

UPDATE OF AIDC IMPLEMENTATION STATUS

(Presented by Indonesia)

SUMMARY

This paper provides information related to the AIDC implementation status in Indonesia, particularly in Ujung Pandang FIR with its adjacent Area Control Centers (ACCs) and other relevant matters during the implementation phase.

1. INTRODUCTION

1.1. Ujung Pandang ACC is bordered with 6 adjacent ACCs, among others: Kota Kinabalu ACC, Manila ACC, Oakland ACC, Port Moresby ACC, Brisbane ACC and Jakarta ACC. The status of AIDC implementation in Ujung Pandang ACC with those ACCs, are:

- Implemented with Brisbane ACC;
- Operation Trial with Manila ACC;
- Tested with Kota Kinabalu ACC, Oakland ACC, and Port Moresby ACC; and
- Planned with Jakarta ACC.

2. DISCUSSION

Ujung Pandang ACC and Brisbane ACC

2.1. The AIDC implementation between Ujung Pandang ACC and Brisbane ACC has been commenced since July 2017. The AIDC implementation exchanges the messages: ABI, EST, ACP, TOC, and AOC. So far, the implementation is running well.

Ujung Pandang ACC and Manila ACC

2.2. Ujung Pandang ACC and Manila ACC have conducted operational trial since 10th October 2019 with the EST, ACP, TOC and AOC messages. The operational trial is still accompanied by voice coordination.

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2.3. During the operational trial, one issue occurred relating to the implementation in ATC procedure. It happened when ATC conducts the voice coordination for non-standard flight level request, or non FLAS (Flight Level Allocation Scheme) that applied between Ujung Pandang ACC and Manila ACC.

The coordination is usually done earlier than the EST send time parameter. The problem will arise when the ATC activates the flight plan in the ATM system right after the voice coordination has been completed. As a result, when the EST message sent to the downstream ATM system, it will be rejected and the AIDC will be fail.

2.4. However, both Ujung Pandang ACC and Manila ACC agree that, in general, the operational trial runs well. In the near future, AIDC operational trial will be evaluated including undertake the corrective action for the issues occurred, and proposed to proceed to the implementation phase with voiceless coordination. Target of implementation is in 3Q-2020.

Ujung Pandang ACC and Kota Kinabalu ATCC

2.5. Ujung Pandang ACC and Kota Kinabalu ACC have conducted AIDC Technical Coordination Meeting on 9 – 10 July 2019 in Makassar. The aim of the meeting is to evaluate and follow up several testing activities have been done previously by Ujung Pandang ACC and Kota Kinabalu ACC, determined action plan, and creating the schedule of implementation plan.

2.6. The meeting agreed to conduct AIDC implementation plan which consist of five phases activities, those are:

- **Phase 1** – Interoperability Test (*Done; held on 7 – 8 August 2019*)

EST and ACP were tested between Ujung Pandang and Kinabalu. This phase aims to check the AFTN line performance, latency and transit time for each message. All messages were exchanged successfully.

- **Phase 2** – AIDC Messages Full (*Done; held on 23 October 2019*)

AIDC messages tested are: ABI, EST, ACP, PAC, TOC, AOC, CDN, REJ and MAC. All EST, ACP and PAC messages were exchanged successfully while the other messages have some issues occurred:

- a) ABI message from Kota Kinabalu ACC contained incorrect route format, so that Ujung Pandang's ATM system rejected this message.
- b) TOC message sent 5 minutes prior to FIR boundary. AOC message from Kota Kinabalu ACC replied the TOC message from Ujung Pandang ACC after the flight data record (flight plan) within the Kota Kinabalu FIR volume. It caused AOC message from Kota Kinabalu ACC was rejected, and flight plan in Ujung Pandang could not terminated. It is under evaluation.

c) ATM system in Ujung Pandang ACC was unable to process REJ message properly and always reject it.

- **Phase 3** – AIDC Messages Test Selective (*Done; held on 11 March 2020*)

Based on the testing result on phase 2, both ACCs agreed to continue the testing by focus on the EST, ACP and PAC messages. During this phase, all EST, ACP and PAC messages were exchanged successfully.

- **Phase 4** – Operational Trial (*Scheduled in 1Q-2020*)

After the last successful testing on phase 3, Kota Kinabalu ACC and Ujung Pandang ACC are preparing the LOCA for the AIDC Operational Trial. It will be delayed from the initial schedule.

- **Phase 5** – Full Operation (*Scheduled in 4Q-2020*)

Phase 5 will be run depend on the evaluation result of Phase 4. It's still targeted as scheduled, 4Q-2020.

2.7. Both ACCs are now discussing on the LOCA and rescheduling the date of AIDC Operational Trial (Phase 4). The EST, ACP and PAC messages will be nominated to implement on the Phase 4.

Ujung Pandang ACC and Oakland ARTCC

2.8. Ujung Pandang ACC and Oakland ARTCC have completed AIDC testing in October and December 2018. The following AIDC messages were exchanged during the testing activities: ABI, EST, ACP, CDN and REJ.

2.9. Based on AIDC testing result, both parties agreed to exchange the following messages: ABI, EST, ACP, and CDN.

The REJ message (as part of the response to the CDN) was successfully accepted by ATM system in Oakland ARTCC, but it could not be processed properly in Ujung Pandang ACC. Therefore, the CDN message was agreed to be applied only one direction from Oakland ARTCC to Ujung Pandang ACC. This issue is under evaluation in Ujung Pandang ACC.

2.10. Ujung Pandang ACC and Oakland ARTCC in coordination to update the current ATS LOCA, and will include AIDC implementation procedure into the ATS LOCA. Target of implementation will be in 4Q2020.

Ujung Pandang ACC and Port Moresby ACC

2.11. The AIDC initial test has been conducted on 7th July 2020. Both ACCs exchanged the following messages: ABI, EST, ACP, TOC, and AOC.

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2.12. The testing has a good result, particularly on EST, ACP, TOC and AOC messages. The official discussion to build the AIDC implementation plan will be conducted in August 2020. Target of implementation to be determined during the discussion.

3. ACTION BY THE MEETING

3.1. The meeting is invited to:

- a) note the information contained in this paper;
- b) to agree on and update the implementation target with the related states; and
- c) discuss any relevant matter as appropriate.
