



ICAO

*International Civil Aviation Organization***Twenty Eighth Meeting of the Communications/  
Navigation and Surveillance Sub-group (CNS SG/28)  
of APANPIRG**

Bangkok, Thailand, 01-05 July 2024

**Agenda Item 11:** Capacity Building, including Human Factors and Air Traffic Safety Electronics Personnel (ATSEPs) related training

**UPDATED INFORMATION OF THE TECHNICAL ASSISTANCE PROJECT ATM  
INFRASTRUCTURE OPERATIONS CAPABILITY BUILDING FOR LAO PDR**

(Presented by Lao PDR)

**SUMMARY**

This Information Paper will briefly update the progress and improvement to our technicians who have been trained under the “Technical Assistance Project ATM Infrastructure Operation Capability Building Project”  
Supported by ICAO

**1. INTRODUCTION**

- 1.1 No Country Left Behind (NCLB) initiative highlights ICAO’s efforts to assist States in implementing ICAO Standards and Recommended Practices (SARPs). The main goal of this work is to help ensure that SARP implementation is better harmonized globally so that all States have access to the significant socioeconomic benefits of safe and reliable air transport.
- 1.2 Due to the outsource maintenance service provider was sudden terminated in early 2022 and caused impact to the maintenance issued of some CNS system (Communications, Navigation, Surveillance, ATM automation, AIS-AIM, simulator, etc.)
- 1.3 Even though Lao PDR had been cooperated and received technical assistance with neighboring’s ANSP especially for providing the technical assistance, sharing experience but those were not enough that is why in March 2022, consulted and contacted via e-mail with CNS Officer of ICAO APAC for stating and asking the assistance (Challenging situation of Lao ANSP)
- 1.4 ICAO APAC State letter Ref.: T 8/12.13: AP-CNS0073/22 18 October, 2022 Approval of funding for an “Implementation Support Project in Lao People’s Democratic Republic (Lao PDR)” The project was planned to last 5-6 months from November 2022 to March 2023 (Kick off meeting and first SME on Radar and VCCS started from 12 December 2022 to 6 January 2023 in Vientiane, Lao PDR and Second SME on ATM AS and AMHS/IT Network started from 5 February to 3 March 2023)
- 1.5 Four prominent subjects: RADAR/ADS-B, VCCS, AMHS/IT network and ATM AS were identified and the onsite support activities covered 11 CNS systems on 7 sites and 55 technicians of LANS, helped to set up Voice Communication Control System (VCCS) and ATM automation simulation platforms, delivered 416 class hours for 708 attendances, 70 handouts, 80 daily/weekly reports, 15 examinations 53 Standard Operating Procedures (SOPs), and 4 recorded demonstration videos on operating equipment

## **2. DISCUSSION**

2.1 The project completed successfully and the conclusions have been identified risk by categorized the priorities as High, Medium and Low that LANS should be mitigate such as below:

- Operation Management (4 High, 2 Medium)
- Human Resources (1 Medium)
- ATM AS (2 High, 3 Medium and 2 Low)
- VCCS (3 High, 3 Medium and 3 Low)
- Radar, ADS-B (2 High, 2 Medium)
- AMHS (5 High, and 1 Low)
- Environment Control (1 Medium)

Experts had provided recommendation with guidance thus afterward those identified have been improved by LANS technicians.

2.2 Outcome from the project is significantly increased our technician's skills level is for maintaining the critical equipment even though some of systems is encountering with software outdate and aging.

2.3 Simulation software setup by Expert is very beneficial for technician to practice and test some configuration before put into the operation systems, also the SOP for maintenance and management has been improved.

2.4 Further improvement also needed to gain the technicians into expertise level is very tough because no further more specific training have been received (onsite experts from equipment provider especially for software and IT technicians), less information for outsource training center with specific training courses.

2.5 Other challenging we facing beside the human resources development is that some systems have not been updated/upgraded or replaced timely to comply with new guidance of ICAO standards such as ATM AS, AMHS, Surveillance system, some IT product are outdated.

2.6 Qualified and competence ATSEP will be an assurance for aviation safety thus human resources development is key to achieve hose target. Reason why, if possible the tightening of assistance, cooperation and support among other states will be crucial for some states in need and should continue regularly especially after the setup of APAC ANSP COMMITTEE.

2.7 Where available to receive from other state's aviation training center/academy or other organization or even manufacturer that can support specific training course for ATSEP would be appreciated.

## **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.

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