

#### 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

# AIR TRAFFIC SAFETY ELECTRONICS PERSONNEL LICENSING SYSTEM (ATSEP) IN INDONESIA

(Presented by Indonesia)

#### **SUMMARY**

This paper provides detailed information related to the provision of Air Traffic Safety Electronics Personnel (ATSEP) in Indonesia.

#### 1. INTRODUCTION

- 1.1 To highlight the important role of Air Traffic Safety Electronics Personnel (ATSEP), in the APANPIRG/34 Indonesia has been published information paper, IP/06, which contains insights regarding the provision of ATSEP Licensing in Indonesia. In details, this paper discusses the license, rating and authority of ATSEP who is responsible for the installation, operation, readiness and maintenance of communication, navigation, surveillance/air traffic management (CNS/ATM) systems in accordance to ensure the quality and performance its facilities to support the air traffic safety.
- 1.2 Indonesia has 1.604 personnel hold ATSEP License and Rating to ensure the quality of the facilities sustainably maintains. The ATSEP personnel also conduct other activities, such as teaching, planning, safety management, security management (e.g. network) and quality management. All The ATSEP personnel are well trained to achieve similar standards and requirements on worldwide basis.
- 1.3 The Implementation of Licensing, Rating, Facility Maintenance and Training for ATSEP Personnel is stipulated in National Regulations as refer to ICAO SARPs. Indonesia has stipulated the ATSEP personnel Licensing system similarly with general rules concerning licenses and ratings for personnel other than flight crew members in Annex 1 to the Convention on International Civil Aviation-Personnel Licensing, whereas ICAO has not yet promulgated in Annex 1.

1.4 DGCA Indonesia conducts the safety oversight over ATSEP competencies to meet their competency requirements.

#### 2. DISCUSSION

General requirement concerning ratings and license for ATSEP Personnel

- 2.1 The ANSP is responsible for determining the scope of its ATSEP to appropriate activities:
  - a. Operational activities;
  - b. Maintenance activities;
  - c. Installation activities.
- An applicants shall, before being issued with licensing or rating for ATSEP personnel, meet such requirement in respect of age, sufficient knowledge of the CNS/ATM service they are supporting and the working limits to be applied, experience and, where appropriate, medical fitness and skill, as specified for the issuing licence or rating.

## 2.3 Knowledge

The applicant shall have demonstrated a level of knowledge appropriate to the holder of an ATSEPlicense, in at least the following subject:

- a. Air law, rules and regulations relevant to the CNS/ATM system;
- b. The principles of operation and functioning of CNS/ATM system;
- c. Use and limitations of equipment used in CNS/ATM system;
- d. Performance relevant to CNS/ATM operation;
- e. Procedures for the management and maintenance of CNS/ATM system (routine, non-routine and emergency);
- f. use of the relevant aeronautical documentation;
- g. Safety practices associated with CNS/ATM system
- 2.4 To carry out their duties/tasks, authorization is issued to ATSEP based on their licensesand ratings. License and Rating examination is using web-based application which are obtained by:

Requirements	Reference	
Medical Fitness	Class 3 medical certificate (4 years of validity)	
Language Proficiency (TOEIC)	Minimum 405(1+ intermediate) Score:  a. 405- 554 (2 years) b. 555 - 650 (4 years) c. > 650 (no evaluation needed)	

Technical Competency	<ul><li>a. Communication</li><li>b. Navigation</li><li>c. Surveillance</li><li>d. Data Processing</li></ul>
Examination	<ul><li>a. Theory (passing grade 70 of 100)</li><li>b. Practical (passing grade 70 of 100)</li></ul>

# 2.4.1 Specification for ATSEP licenses consist of:

- I. Name of state;
- II. Title of license;
- III. Type of license according to scope of work;
- IV. Latest image;
- V. Serial number of the license;
- VI. Name of holder in full;
- VII. Date of birth;
- VIII. Address of holder;
- IX. Nationality of holder;
- X. Signature of holder;
- XI. Authority and, where necessary, conditions under which the license is issued;
- XII. Certification concerning validity and authorization for holder to exercise privileges appropriate to license;
- XIII. Signature of officer issuing the license and the date of such issue;
- XIV. Stamp of licensing authority;
- XV. Rating;
- XVI. Remarks, including language proficiency validation; and
- XVII. Any other details.

### 2.4.2 Rating Category:

Communication	Navigation	Surveillance	<b>Data Processing</b>
authorized to operate, maintain, design, and development of Communication Facilities:  • VHF A/G (AFIS, TWR, APP, ACC, ER)	design, and development of Navigation Facilities:  • VOR		authorized to operate, maintain, design, and development of 1 Data Processing Facilities:  • ATC Automation (CBT, CPDLC, AIDC)

Communication	Navigation	Surveillance	Data Processing
<ul> <li>VSCS</li> <li>VHF Data Link</li> <li>ATN</li> <li>ATIS / Data Link</li> <li>HF A/G</li> <li>Voice Recorder</li> <li>HF SSB and or</li> <li>Ground-to-ground communication facilities (Direct Speech)</li> </ul>	<ul><li>MLS</li><li>TLS</li><li>GBAS and or</li><li>NDB</li></ul>	<ul> <li>MLAT</li> <li>ADS-B</li> <li>ADS-C</li> <li>SMR and or</li> <li>PAR</li> </ul>	<ul> <li>MHS         (Teleprinter,         AMSC, AMHS)</li> <li>ASMGCS and or</li> <li>AIM Automation</li> </ul>

- 2.5 In order to carry out the examination, issuance and validation of licenses and ratings of ATSEP Personnel including the assessment of TOEIC, the Director General establishes an Examiner, administrator, checker and OJT Training Instructor, with duties whereas follows:
  - a. Examiner is personnel of the Directorate General authorized by the Director General for conducting assessment / examination on license validity of ATSEP.
  - b. Administrator is an Authorized Directorate General Personnel by the Director General to inspect administration requirements, and process and report examination results.
  - Checker is an ATSEP authorized by the Director General to carry out rating examinations based on the license and rating validity to maintain rating; and
  - d. On The-Job Training Instructor is an ATSEP with certain license and rating to provide on-the-job training for competency training participants and initial personnel in order to obtain rating.
- 2.6 DGCA published national CNS/ATM personnel training scheme, in order to further standardize aeronautical telecommunication personnel training and competency assessment. The training programmed focuses on the development of main and additional competencies to deal with the development of aeronautical telecommunication technologies and industry.

# 2.6.1 The general process of ATSEP training and competency assessment is shown in the following figures

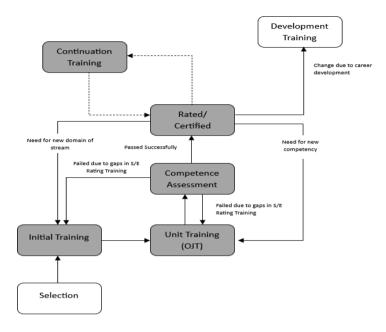


Figure 1 ATSEP training and competency assessment

- 2.6.2 The ANSP shall set up and maintain programmed for:
  - Continuing assessment of its employees' competency for the purpose of ensuring that they continue to satisfy the current requirements in related to ratings and endorsement;
  - b. Familiarization, retaining and assessment of any its employees at any time do not satisfy the current requirements.
- 2.7 The Director General conducts the oversight towards approved training providers and the implementation of ATSEP licensing, rating, training, and competency, the oversight includes audit, inspection, surveillance and monitoring. DGCA also conduct further inspection with any administration penalty given when the operator conduct violation that cause to potential hazards to aviation security and safety by giving penalty phase such as Notice of Reprimand, Letter of Suspension, administration fines, and/or license and rating revocation.

#### 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 matters as appropriate.

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