#### GAP ANALYSIS QUESTIONNAIRE ON APPROVAL OF AVIATION TRAINING ORGANISATIONS

The ASEAN Mutual Recognition Arrangement on Flight Crew Licensing (MRA-FCL) was signed by ASEAN Transport Ministers on 13 Oct 2017 in Singapore. This document lays down the broad principles and framework to facilitate mutual recognition of approvals, certificates and licences related to flight crew licensing.

- 4 Implementing Protocols (IPs), containing detailed procedures and scope, will be developed in sequence to support the implementation of the MRA-FCL:
- 1. Qualification of flight simulation training devices (FSTDs)
- 2. Aviation training organisations
- 3. Safety oversight capabilities of NAA
- 4. Conversion of flight crew licences

The questionnaire will identify similarities and differences between regulations and procedures amongs ASEAN Member States on the approval of aviation training organisations. This would support the development of draft standards and procedures for mutual recognition of such training organisations qualified by ASEAN Member States under IP 2.

This gap analysis questionnaire has 11 sections, and will take about 1hour to complete.

For the purpose of this questionnaire, as we are attempting to understand the system in the State as comprehensively as possible, as such, we are differentiating between Flight Training Organisations (FTOs), and Type Rating Training Organisations (TRTOs), where FTOs are organisations that conduct ab- initio training for flight crew, and TRTOs are organisations that conduct type rating training for flight crew.

#### Section 1: Landscape scan

1. How many training organisations hold the CAA's approval? List the training organisations and the type of training approvals.

Pilot School Certificate: 18 Organisation

Training Center Certificate: 20 Organisation (7 are TRTO)

2. Do these organisations also hold other State's approvals (e.g. EASA, FAA, other ASEAN Member States)

Yes, Some of ATOs have other state approval e.g.:

- 1. Mitra Aviasi Perkasa 141D-17 (CAA VIETNAM No. 00335-FATO)
- 2. Balai Besar Fasilitas Kalibrasi Penerbangan 142D- 23 (CAA VIETNAM No. 00223-VATO)

And some of FSTD under ATO 142 have approval from EASA, Bangladesh, Thailand, Malaysia and Guatemala (Listed on the Appendix attached)

- 3. What type of training organisations are these? (i.e. FTO, TRTO)
  - a. How many are in the country? How many are overseas? If overseas, where?
  - b. How many are foreign training organisations that hold your state's approval?
  - a. We have 18 FTO and 7 TRTO in Indonesia
  - b. There is no foreign training organisations
- 4. What type of training approvals does the CAA issue? (e.g. CPL, MPL, IR, A320, A330 etc.)
- 1. Sport Pilot License
- 2. Private Pilot License
- 3. Instrument Rating
- 4. Commercial Pilot License
- 5. Airline Transport Pilot License
- 6. Flight Instructor (F/G)
- 7. Additional Aircraft Category and/or Class Rating
- 8. Aircraft Type Rating, other than ATPL (B737 Series, A320F, A330, Beechcraft B350, ATR 72, CRJ 1000)

(Reference CASR 61, 141 & 142)

Issued for fixed wing and rotary wing

5. If the CAA does not issue training organisation approvals, how does the CAA validate other State's training for the purpose of a licence issuance.

DGCA validate other State's training for the purpose of a license issuance by:

- 1. Issued validation
- 2. Conversion

(Refer CASR 61 and SI 8900-5.2)

### Section 2: Regulations and processes

1. Where are your CAA's regulations for training organisation approval? What other publications are there relating to training organisational approval (include training programmes approval, UPRT, SMS, Quality assurance system etc.)

# DGCA regulate training organization approval under:

- 1. CASR Part 141 Certification and Operating Requirements for Pilot School
- 2. CASR Part 142 Certification and Reporting Requirement for Training Center
- 3. CASR Part 61 Licensing of Pilots & Flight Instructors
- 4. CASR Part 60 Synthetic Training Device
- 5. CASR Part 19 Safety Management System
- 6. CASR Part 91 General Operating and Flight Rules

#### Publication related to ATO, are:

- 1. Staff Instruction 141-01 Certification, Operating Requirements and Continuing Surveillance for Pilot Schools
- 2. Staff Instruction 8900-5.2 Personal Licensing Procedures and Flight Operations Inspector Task and Responsibilities
- 3. Staff Instruction 8900-11.10 Synthetic Training Device Evaluations
- 4. Staff Instruction 8900-5.14 English Language Proficiency Test
- 5. Staff Instruction 8900-2.10 Certification Operating Requirements and Continuing Surveillance for Training Center
- 6. Staff Instruction 8900-3.11 Check Pilot, Instructor, and Supervisor Program
- 7. Staff Instruction 19-05 Safety Management Systems (SMS) Guidance for Inspector & Organizations
- 8. AC 141-01 Syllabus and Curriculum for Pilot School

#### Note

*UPRT not yet categorized in mandatory training.* Currently, DGCA only require for Upset Recovery Training (CASR 121 Appendix C and CASR 135)

2. What is the validity period of a training organisation approval?

Not Exceed than 2 Years for both Pilot School Certificate and Training Center Certificate and 1 year for FSTD

3. What are the fees and charges for a training organisation approval? Please describe in the following table.

(Refer PP 15 Tahun 2016)	
FTO (initial)	IDR 20.000.000
FTO (renewal)	IDR 15.000.000
FTO (addition of training approval)	-
FTO (addition of geographical training location)	-
TRTO (Initial)	IDR 15.000.000
TRTO (renewal)	IDR 10.000.000
TRTO (addition of training approval)	-
TRTO (addition of geographical training location)	-

## Section 3: Requirements on the organisation

1. Does the CAA have requirements on aspects such as the organisational structure of the training organisation, key appointment holders, minimum qualification of these appointment holders, instructor to student ratio?

Yes, DGCA have requirements on aspects organisational structure of the training organisation stated on CASR Part 141.8a(c); CASR Part 141.33; CASR 142.5a(c); CASR Part 142.13

Key appointment holders stated on CASR Part 141.33; CASR Part 142.13.

Minimum qualification of these appointment holders stated on CASR Part 141.35; CASR Part 141.36; CASR Part 141.37; CASR Part 142.47

There is no specific requirement for Instructor to student ratio stated on regulation, but ATO required for develop quality assurance system on the Training Procedure Manual which must include the effectivity of learning activity

Does the CAA have requirements for instructors? Please describe in the following table. Instructor Minimum qualification Qualification process **Ground instructor** 1. Is at least 18 years of age; (Refer to SI 8900-5.2) 2. Is able to read, write, and speak and understand in the 1. Conduct Fundamental of English language; Instruction 3. Is Complete at least 8 hours of ground training on the 2. Satisfy aeronautical following subject matter: knowledge requirement by a. Instruction methods and techniques. showing evidence of ground b. Training policies and procedures. instruction or by presenting a c. The fundamental principles of the learning certified college transcript or process. teaching certificate d. Instructor duties, privileges, responsibilities, Conduct the practical test and limitations. e. Proper operation of simulation Controls and Proper operation of environmental control and warning or caution panels. g. Limitations of simulation. h. Minimum equipment requirements for each curriculum. i. Revisions to the training courses. Cockpit resource management and crew coordination. 4. Satisfactorily complete a written test on the subject specified above and accepted by the Director General as being of equivalent difficulty, complexity, and scope as the tests provided by the Director General for the flight instructor airplane and instrument flight instructor knowledge tests. (Refer CASR 142.47)

#### Flight instructor - CPL

#### To be eligible for a Flight Instructor License a person must:

- (a) Be at least 18 years of age;
- (b) Be of good moral character;
- (c) Read, write, and converse fluently in English;
- (d) Hold:
  - (1) A commercial or airline transport pilot license with an aircraft rating appropriate to the flight instructor rating sought, and
  - (2) An instrument rating, if the person is applying for an airplane or an instrument instructor rating:
- (e) Pass a written on the subjects in which ground instruction is required by Part 61.185; and
- (f) Pass a practical test on all items in which instruction is required by Part 61.186 and, in the case of an applicant for either a flight instructor airplane or flight instructor glider rating, present a logbook endorsement from an appropriately licensed and rated flight instructor who has provided the applicant with spin entry, spin, and spin recovery training in an aircraft of the appropriate category that is certificated for spins, and has found that applicant competent and proficient in those training areas. Except in the case of retest after failure for the deficiencies stated in Part 61.49(b), the person conducting the practical test may either accept the spin training logbook endorsement or require demonstration of the spin, and spin recovery maneuver on the flight portion of the practical test.
- (g) Be attached to a flying school or flying club.
- (h) meet the aeronautical knowledge requirement stated on CASR 61.185
- (i) meet the skill and flight instruction requirement stated on CASR 61.187

(ref. CASR Part 61.183)

#### Training Centre Flight Instructor eligibility requirement

- 1. Comply with ground instructor requirement stated above
- 2. Meet at least the following requirement:
  - a. For flight instructor must meets the aeronautical experience requirement of CASR 61.129. (a), (b), (c), or (e) as applicable
  - b. if instructing in flight simulator or flight training device requiring a type rating or if instructing in a curriculum leading to the issuance ATPL or added rating of ATPL must meet experience requirement of CASR 61.155, 61.157, 61.159, 61.161, and 61.163 as applicable

(ref. CASR Part 142.47)

Flight instructor - MPL Phase

NIL

# (Refer to SI 8900-5.2 Chapter 11)

- 3. Conduct Fundamental of Instruction
- Satisfy aeronautical knowledge requirement by showing evidence of ground instruction or by presenting a certified college transcript or teaching certificate
- 5. Conduct the practical test
- 6. Must hold Medical Certificate
  Class 1

Flight instructor – Type	Training Centre Flight Instructor eligibility requirement	(Refer to SI 8900-5.2 Chapter 11
rating	1. Comply with ground instructor requirement stated above	Section 2)
	2. Comply the requirement of CASR 61 Subpart G	
	(ref. CASR Part 142.47)	1. Conduct Fundamental of
		Instruction and the test
	Additional:	for the appropriate rating
	Flight Instructor Airplane for Air Operator (CASR 121.411 &	2. Satisfy aeronautical
	CASR 121.413):	knowledge requirement
	1. Holds the airman certificates and rating required to serve	by showing evidence of
	as a pilot in command	ground instruction or by
	2. Has satisfactorily completed the appropriate training	presenting a certified
	phases for the airplane, including recurrent training, that are required to serve as a pilot in command	college transcript or
	3. Has satisfactorily completed the appropriate proficiency	teaching certificate
	or competency checks that are required to serve as a pilot	3. Conduct the practical test 4. Must hold Medical
	in command	Certificate Class 1
	4. Has satisfactorily completed the applicable training	5. Each flight instructor who
	requirements of 121.415, including in-flight training and	provides training in an
	practice for initial and transition training	aircraft must satisfactorily
	5. Holds at least a Class I medical certificate	complete an approved
	6. Has satisfied the recency of experience requirements of Section 121.439	course of ground
	7. That person has satisfactorily completed initial or	instruction and flight
	transition flight instructor training	training in an aircraft,
	8. satisfactorily conducts instruction within the preceding 24	flight simulator, or flight training device
	calendar months	truming device
Synthetic flight instructor –	NIL	
MPL phase 2 to 4		
		<u> </u>

# Synthetic flight instructor Type rating

- 1. Comply with ground instructor requirement stated above
- 2. Comply with CASR 61 Subpart G

(ref. CASR Part 142.47)

#### Additional:

A candidate must meet the following eligibility requirements:

- 1) Under a CASR Part 121 training program, a pilot simulator instructor candidate must hold at least an Airline Transport Pilot (ATP) licence; additionally an approved type rating for initial instruction.
- 2) Under a CASR Part 135 training program, a pilot simulator instructor candidate must hold an ATP licence and the appropriate type rating. A commercial pilot licence with an instrument rating is sufficient when operations of the aircraft does not require the PIC to hold an ATP licence and type rating.
- 3) All candidates must have received the simulator instructor qualification required by the operator's approved training program including that required by CASR 121.411 and 121.413, or CASR 135.409 and 135.411, as applicable, including such topics as:
  - a) Briefings and debriefings by the PIC
    - i. to flight deck crewmembers.
    - ii. to other crew members.
  - b) Safety preparedness and countermeasures
    - i. in a flight simulator (such as emergency exits, fire and smoke procedures, and simulator motion failures).
- 5) Maintain line currency as a flight crewmember with the operator, or be line familiar with the operator's procedures and line operation by participating in a line observation program that has been approved by the operator's POI.

(Refer SI 8900-3.11)

#### Refer to SI 8900-5.2 Chapter 11)

- 1. Conduct Fundamental of Instruction and the test for the appropriate rating
- 2. Satisfy aeronautical knowledge requirement by showing evidence of ground instruction or by presenting a certified college transcript or teaching certificate
- 3. Conduct the practical test
- 4. Must hold Medical Certificate Class 1
- 5. Must satisfactorily complete an approved course of training in the operation of the flight simulator, and an approved course of ground instruction, applicable to the training courses the instructor is designated to instruct.

# Section 4: Manuals and Documentation

- 1. What manuals or documentation does the CAA require the training organisation to have? E.g. operations manual, training manual, quality manual, SMS manual.
- 1. Training Procedure Manual:
  - a. Operation Procedures
  - b. Training Procedures
  - c. Quality Procedures
  - d. Training Course Outline

(Refer to CASR 141.8a; CASR 142.5a)

2. Safety Management System Manual (if direct contact with Aircraft Operation)

(Refer CASR 19 & SI 19-05)

# Section 5: Training programme requirements

1. State the training requirements for each type of training approval, including experience requirements and mandatory training, such as UPRT, MPL Phases of training etc.

Type of training	Training requirements
CPL	CASR Part 141 Appendix D to Part 141
	CASR Part 141xD.3; CASR Part 141xD.4
IR	CASR Part 141xC.3; CASR Part 141xC.4
MPL	NIL
Type rating training	CASR Part 141xJ.3; CASR Part 141xJ.4

# **NOTE**

Currently, DGCA only require for Upset Recovery Training (CASR 121 Appendix C and CASR 135)

# Section 6: Training facilities, equipment, aircraft requirements

1. What type of simulators are being used for training? What are the credits given for the training/test?

Type of Training/ Tests	Type of FSTD used	Credits given for training/ tests conducted
CPL	FFS and FTD	For FFS, maximum of 30 percent of the total flight training hour requirements  For FTD, maximum of 20 percent of the total flight training hour requirements  if used in combination, may be credited for a maximum
		of 30 percent of the total flight training hour requirements

	FEC . LETT	
IR	FFS and FTD	For FFS, cannot exceed 50 percent of the total flight training hour requirements  For FTD, cannot exceed 40 percent of the total flight training hour requirements  if used in combination, cannot exceed 50 percent of the total flight training hour requirements
MPL – Phase 1	NIL	
MPL – Phase 2	NIL	
MPL – Phase 3	NIL	
MPL – Phase 4	NIL	
Type Rating Training	FTD LEVEL 6 and FFS	
		<b>For FFS</b> , credited for a maximum of 50 percent of the total flight training hour requirements
		<b>For FTD</b> , 25 percent of the total flight training hour requirements
		if used in combination, may be credited for a maximum of 50 percent of the total flight training hour requirements

- 2. What are the CAA's requirements for training facilities such as classroom, briefing rooms?
- Each room, training booth, or other space used for instructional purposes is climatically controlled or ventilated, equipped with controllable lighting to enable satisfactory use of all proposed training equipment, and otherwise provides for the comfort and physiological needs of the students and to conform to local building, sanitation, and health codes; and

(reference: CASR Part 141.45; CASR Part 142.15)

2. The training facility is so located that the students in that facility are not distracted by the training conducted in other rooms, or by flight and maintenance operations on the airport.

(reference : CASR Part 141.45)

# Pilot briefing area:

- 1. Adequate to shelter students waiting to engage in their training flights;
- 2. Arranged and equipped for the conduct of pilot briefings; and
- 3. equipped with private landline or telephone communication to the nearest DGCA Flight Service Station for CPL and IR course

(reference : CASR Part 141.43)

#### Section 7: Examiners

1. What are the CAA's requirements for qualifying to be an examiner? E.g. CAA examiner, examiner appointed in industry, single pilot examiner, multi pilot examiner. What are the experience requirements for each examiner?

#### Examiner/Evaluator requirements:

- 1. Is approved by the Director General
- 2. Is in compliance with flight instructor eligibility requirement, instructor training and testing requirements
- 3. Prior to designation, every 12 calendar months period following the initial designation must satisfactory completes a curriculum that include:
  - a. Evaluator duties, functions, and responsibilities
  - b. Methods, procedures, and techniques for conducting required tests and checks
  - c. Evaluation of pilot performance; and
  - d. Management of unsatisfactory tests and subsequent corrective action; and
  - e. If evaluating in qualified and approved flight training equipment must satisfactorily pass a written test and annual proficiency check in a flight simulator or aircraft in which the evaluator will be evaluating

(reference: CASR 142.55)

#### Experience requirement for examiner/evaluator:

There is no specific requirement for examiner/evaluator experience, meanwhile it must comply the instructor requirement and examiner requirement

2. What is the CAA's qualification process of an examiner?

(Reference: ATO- SI 8900 5.2 Chapter 15, Air Carrier Designation Representative- SI 8900 5.2 Chapter 15)

<ol><li>3. W</li></ol>	/hat is the	CAA's	appointment ter	m for an	examiner?
------------------------	-------------	-------	-----------------	----------	-----------

Appointment term for an examiner are by designated representative using Certification of Designation (DGCA Form NO. 183-03)

4. What is the CAA's re-appointment criteria for an examiner?

Examiners must attend the annual examiner meeting held by the designating DGCA and meet the following specific criteria for renewal of examiner designations

- 1. Recurrent Standardization Training
- 2. Certification Activity
- 3. Reissuance of Designation Authorization
- 4. Practical Test
- 5. Designation Number

# (Refer to SI 8900-5.2 Chapter 15)

- 5. How does the CAA oversight the examiners?
- 1. Annual Inspection
- 2. Surveillance

(Refer to SI 8900-5.2 Chapter 16)

# Section 8: Record keeping system

1. What are the CAA's requirements for record keeping? Please state what records need to be kept, and for how long?

DGCA require ATO record keeping on CASR 141.101 Subpart F and CASR 142.73 Subpart E

# Records need to be kept are:

- 1. Student enrollment record
- 2. Chronological log of student course
- 3. Graduation, Termination or Transfer to another school

The holder of a pilot school certificate or a provisional pilot school certificate must retain each student record required by this section for at least 5 (five) years from the date that the student

# Section 9: Quality Assurance System

1. Does the CAA require the training organisation to implement a Quality Assurance System?

Yes, DGCA require the training organisations to implement a QAS on CASR 141.83 and CASR 142.70a.

2. What are the CAA's key requirements for the Quality Assurance System?
Key Requirement :
1. Independent internal audit to monitor compliance
2. Quality feedback reporting system
Section 10: Safety Management System
Does the CAA require the training organisation to implement a Safety Management System?
Yes, DGCA require training organization to implement SMS refer to CASR Part 19 (if direct contact with Aircraft
Operation)
2. What are the CAA's criteria for a Safety Management System?
The SMS must include:
Hazard Identification and Risk Management     Safatu Assurance
Safety Assurance     Safety Performance Monitoring and Measurement
4. Management of Change
5. Safety Promotion
(Refer to CASR 19 Subpart B)
Section 11: CAA oversight
<ol> <li>Does the CAA implement a safety oversight programme on the training organisations who hold your approval? E.g. surveillance programme.</li> </ol>
Yes, DGCA implement for the oversight program, such as:
1. Renewal safety audit
2. Annual surveillance program
(Refer to SI 8900-2.10; SI 141-01)

2. How often does the CAA conduct safety audits/ inspections on an organisation?
Biannual for safety audit and conduct annually surveillance program
3. How does the CAA address safety/ training issues by the training organisation? Is there a difference in procedure for major vs minor safety issues?
DGCA address safety issues finding as 3 category, are:
<ol> <li>Non Compliance (NCP)</li> <li>Non Conformance (NCF)</li> <li>Non Adherence (NAD)</li> </ol>
4. Does the CAA have an enforcement policy in handling non-compliance?
Yes, DGCA have enforcement policy using Ministry Degree Number 78 Tahun 2017 based on Resolution of Safety Issue.

Please complete this questionnaire prior to the ARISE Plus  $4^{th}$  MRA FCL workshop scheduled for 3-5 March in Bangkok, Thailand. States would be invited to present their answers to the questionnaire, at the workshop. Should you have queries regarding the questionnaire, please feel free to contact Ms Nicole Benny or Mr Clyde Ong (Nicole Benny@caas.gov.sg or Clyde Ong@caas.gov.sg).