Who is the competent authority (66.A.1)

Who is the competent authority?

- The authority to which the applicant requests the licence (66.A.1(a)1).
  - The licence can be transferred to another Member State is agreed with the authority who initially issued it. The initial one will be revoked and the records will be transferred to the authority issuing the new one (66.A.1(a)2).

- The licence can be applied for in any Member State (regardless of nationality or place of residence). The applicant must be at least 18 years old.

- EASA is not a competent authority for Part-66 licences (does not issue Part-66 licences).

- Once a Part-66 licence is obtained, it is valid and mutually recognised in all the Member States.
Group 1:
- complex motor-powered aircraft
- multiple engine helicopters
- aeroplanes with maximum certified operating altitude exceeding FL290
- aircraft equipped with fly-by-wire systems
- gas airships above ELA2 (future)
- other aircraft requiring an aircraft type rating when defined so by the Agency.

Group 2: aircraft other than Group 1 belonging to the following subgroups:
- Sub-group 2a: single turbo-propeller engine aeroplanes
- Sub-group 2b: single turbine engine helicopters
- Sub-group 2c: single piston engine helicopters

Group 3: piston engine aeroplanes other than those in Group 1

Group 4: sailplanes, powered sailplanes, balloons and airships other than those in Group 1 (future)
Part-66 licences

- Existing licences:
  - For aeroplanes and helicopters (A, B1, B2, B3, C)

- In the near future:
  - For sailplanes, powered sailplanes, balloons and airships (L1, L2, L3, L4, L5)
  - Avionics licence for light aircraft (B2L)

- Part-66 licences are not planned for components (they will continue being covered by national rules).
Existing licence categories (66.A.3)

Category A, divided in the following subcategories:

- A1 Aeroplanes Turbine
- A2 Aeroplanes Piston
- A3 Helicopters Turbine
- A4 Helicopters Piston

Category B1, divided in the following subcategories:

- B1.1 Aeroplanes Turbine
- B1.2 Aeroplanes Piston
- B1.3 Helicopters Turbine
- B1.4 Helicopters Piston
Existing licence categories (66.A.3)

**Category B2**
- The B2 licence is applicable to all aircraft.

**Category B3**
- The B3 licence is applicable to piston-engine non-pressurized aeroplanes of 2000 Kg MTOM and below.

**Category C**
- The C licence is applicable to aeroplanes and helicopters.
Category B2L (future)

The B2L licence is applicable to all aircraft other than those in Group 1 and is divided in the following ‘system ratings’:

- communication/navigation (com/nav)
- instruments
- autoflight
- surveillance
- airframe systems
Category L, divided in the following subcategories (future):

- L1C: composite sailplanes,
- L1: sailplanes,
- L2C: composite powered sailplanes and composite ELA1 aeroplanes,
- L2: powered sailplanes and ELA1 aeroplanes,
- L3H: hot air balloons,
- L3G: gas balloons,
- L4H: hot air airships,
- L4G: ELA2 gas airships,
- L5: gas airships other than ELA2,
“ELA1 aircraft” means the following manned European Light Aircraft:

(i) an aeroplane with a Maximum Take-off Mass (MTOM) of 1200 kg or less that is not classified as complex motor-powered aircraft;

(ii) a sailplane or powered sailplane of 1200 kg MTOM or less;

(iii) a balloon with a maximum design lifting gas or hot air volume of not more than 3400 m³ for hot air balloons, 1050 m³ for gas balloons, 300 m³ for tethered gas balloons;

(iv) an airship designed for not more than four occupants and a maximum design lifting gas or hot air volume of not more than 3400 m³ for hot air airships and 1000 m³ for gas airships;
“ELA2 aircraft” means the following manned European Light Aircraft:

(i) an aeroplane with a Maximum Take-off Mass (MTOM) of 2000 kg or less that is not classified as complex motor-powered aircraft;

(ii) a sailplane or powered sailplane of 2000 kg MTOM or less;

(iii) a balloon;

(iv) a hot air ship;

(v) a gas airship meeting all of the following elements:
   - 3% maximum static heaviness,
   - Non-vectored thrust (except reverse thrust),
   - Conventional and simple design of: structure, control system and ballonet system
   - Non-power assisted controls;

(vi) a Very Light Rotorcraft.
Privileges of the licence (66.A.20)

A licence

- Release of minor scheduled line maintenance and simple defect rectification.
- Only for specific tasks listed in the certifying staff authorisation *(typical tasks are listed in AMC 145.A.30(g))*.
- Only for work personally performed (no supervision capacity).

B1 and B3 licences

- Release of maintenance on aircraft structure, powerplant and mechanical and electrical systems.
- Release of work on avionic systems requiring only simple tests to prove their serviceability and not requiring troubleshooting.
- The B1 licence includes the corresponding A licence subcategory.
Privileges of the licence (66.A.20)

- **B2 licence**
  - Release of maintenance on aircraft structure electrical and avionics systems.
  - Release of electrical and avionics tasks within powerplant and mechanical systems requiring only simple tests to prove their serviceability.
  - Release of minor scheduled line maintenance and simple defect rectification, limited to:
    - The tasks listed in their certifying staff authorisation.
    - The ratings contained in the B2 licence.
  - The B2 licence **does not** include any A subcategory.

- **C licence**
  - Release of base maintenance for the entire aircraft.
Definition of “Electrical System” (GM 66.A.20(a)):

The aircraft electrical power supply source, plus the distribution system to the different components and relevant connectors. Lighting systems are included, as well as the following typical practices on electrical system cables and connectors:

- Continuity, insulation and bonding techniques and testing.
- Crimping and testing of crimped joints.
- Connector pin removal and insertion.
- Wiring protection techniques.
Definition of “Avionic System” (GM 66.A.20(a)):

Any aircraft system that transfers, processes, displays or stores analogue or digital data using data lines, data buses, coaxial cables, wireless or other data transmission medium, and includes the system’s components and connectors. Examples include the following:

- Autoflight
- Communication, Radar and Navigation
- Instruments (NOTE: maintenance on electro-mechanical and pitot-static components may also be released by B1 licence holders)
- In-flight Entertainment Systems
- Integrated Modular Avionics
- On-Board Maintenance Systems
- Information Systems
- Fly-by-Wire Systems (related to ATA 27)
- Fibre Optic Control Systems
Definition of “Simple Test” (GM 66.A.20(a)):

A test described in approved maintenance data and meeting all the following criteria:

- Serviceability can be verified using aircraft controls, switches, BITE, Central Maintenance Computer or external test equipment not involving special training.
- The outcome of the test is a unique go-no go indication or parameter (single value or a value within a tolerance), without any interpretation of the result or interdependence of different values.
- No more than 10 steps as described in the approved maintenance data (excluding those needed to configure the aircraft for the test or to return it to the initial configuration). Pushing a control, switch or button, and reading the corresponding outcome may be considered as a single step.
Responsibilities of the licence holder and the maintenance organisation in relation to the certification privileges (66.A.20(b)):

- The holder of an aircraft maintenance licence may not exercise its privileges unless:
  - In compliance with the applicable requirements of Part-M and Part-145
  - 6 months of experience in the last 2 years
  - Adequate competence to certify maintenance on the corresponding aircraft (*)
  - Able to read, write and communicate in the language of the technical documentation and procedures.

(*) This means the following (see AMC 66.A.20(b)3):

- The licence holder and the maintenance organisation where he/she is contracted/employed are responsible for ensuring appropriate knowledge, skills, attitude and experience to release the aircraft being maintained. This is essential because holding an appropriately rated licence does not necessarily mean that the person is competent to release a particular aircraft. (See additional information in AMC 145.A.35(a))
Typical examples of areas which may not have been covered by the licensing requirements (AMC 66.A.20(b)3):

- Ratings endorsed on the licence after attending type training covering only certain variants (Airbus A318/A319/320/321 rating endorsed after attending A320 course).
- Maintenance performed on a model/variant for which the technology has significantly evolved since the type training course was imparted.
- Specific technology/customer options.
- Changes in the Basic Knowledge syllabus (Appendix I) not requiring re-examination of existing licence holders.
- Endorsement of group ratings based on experience, type training or type examination on a representative number of tasks/aircraft.
- Persons having 6 months of experience within the last 2 years only for certain similar aircraft (AMC 66.A.20(b)2).
- Removal of limitations from a converted licence only after examination on the applicable modules, without appropriate experience and, possibly, additional type training.
Requirements in order to obtain a Part-66 licence

In order to obtain a Part-66 licence **without ratings**, it is required to:

- Meet the Basic Knowledge requirements of 66.A.25.
- Meet the Basic Experience requirements of 66.A.30.

However, only the category A privileges can be exercised without ratings (with an A or B1 licence).

**In order to be endorsed with aircraft ratings, it is required to:**

- Meet the requirements of 66.A.45.
Basic Knowledge requirements (66.A.25)

- Training is not mandatory. Only examination is mandatory.

- The content of basic training (if performed) has to comply with Appendix I to Part-66.

- The content and length (number of questions and time) of the examinations have to comply with Appendix I and Appendix II to Part-66.

- Basic training can only be performed in Part-147 organisations. If performed, it allows a reduction in the Basic Experience required to obtain the licence.

- Basic examination can be performed in Part-147 organisations or at the Competent Authority responsible for issuing the licence. However:
  - Examinations performed at Part-147 organisations can be used to apply for a Part-66 licence in any Member State.
  - Examinations performed at the Competent Authority are only valid for Part-66 licence application in the Member State of that authority.

Once the licence is issued, it is valid in any Member State.
Basic Experience requirements (66.A.30)

- Category A, B3 and B1.2/B1.4: Between 1 and 3 years.

- Category B2 and B1.1/B1/3: Between 3 and 5 years.

- Category C for large aircraft:
  - 3 years as B1.1, B1.3 or B2, or
  - 5 years as B1.2 or B1.4

- Category C for other than large aircraft:
  - 3 years as B1 or B2

For the extension of the licence from one category to another:

- See Appendix IV to Part-66
Aircraft rating requirements (66.A.45)

See 66.A.45 and GM66.A.45
What is an aircraft type rating (different variants) (AMC 66.A.45(b)):

- An aircraft type rating includes all the models/variants listed in column 2 of the Appendix I to AMC.

- When the rating is amended in Appendix I, the holder of a licence with the previous type rating is entitled, upon request, to get the new full type rating without further requirements.

- Similarly, type training courses covering certain but not all the models/variants of the type rating, are valid for endorsement of the full type rating.

It is the responsibility of the licence holder and, if applicable, the maintenance organisation, to comply with 66.A.20(b)3, 145.A.35(a) and M.A.607(a) before exercising certification privileges.
Experience required for the endorsement of group/sub-group ratings and for the endorsement of individual type ratings after type examination (AMC 66.A.45(d), (e)3, (f)1 and (g)1):

A representative cross-section including 50% of the tasks of Appendix II to AMC, relevant to the licence category and to the aircraft ratings applied for:

- It should cover tasks from each paragraph of Appendix II to AMC.
- Other relevant tasks may be considered as an alternative.
- Should be obtained under supervision of certifying staff.
- Should be demonstrated by records or logbook.
In the case of (sub)group ratings, this experience may cover one or several aircraft types of the applicable (sub)group and may include experience on aircraft in group 1, 2 or 3 as long as it is relevant.

In the case of individual type ratings after type examination, this experience may be reduced to (instead of 50%):

- 30% of the relevant tasks, for the second endorsed aircraft type from the same manufacturer (sub)group.
- 20% of the relevant tasks for subsequent aircraft types from the same manufacturer (sub)group.
Aircraft rating requirements (66.A.45)

- **Limitations:**
  - **For B1.2 licence, on Group 3 aircraft (if no appropriate experience can be shown) (66.A.45(f)2):**
    - Pressurised aeroplanes,
    - Wooden structure aeroplanes,
    - Aeroplanes with metal tubing structure covered with fabric,
    - Metal structure aeroplanes,
    - Composite structure aeroplanes.
  - **For B3 licence (if no appropriate experience can be shown) (66.A.45(g)2):**
    - Wooden structure aeroplanes,
    - Aeroplanes with metal tubing structure covered with fabric,
    - Metal structure aeroplanes,
    - Composite structure aeroplanes.
Limitations (66.A.50)

- Limitations:
  - New point 66.A.50 “Limitations”:
    - They are exclusions from certification privileges.
    - Limitations referred in 66.A.45 shall be removed based on experience or after practical assessment by the NAA.
    - Limitations referred in 66.A.70 shall be removed after examination on the modules/subjects defined in the conversion report.
Experience required to remove limitations referred to in 66.A.45 (AMC 66.A.50(b)):

Performance of a variety of tasks appropriate to the limitation:

- Should be obtained under supervision of certifying staff.
- Should include the tasks required by a scheduled annual inspection.

Alternatively, may be replaced (if agreed by the NAA) by:

- Theoretical and practical training provided by the manufacturer, as long as an assessment is carried out and recorded by the manufacturer.
Basic knowledge examinations and basic experience:

- All basic knowledge examinations and experience must be passed/gained within the 10 years prior to the application for a licence (66.A.25(b) and 66.A.30(f)).
  - Certificate of recognition modified: date of passed module is recorded.
  - Recent experience still required.

- This limit does not apply, in the case of a licence extension, for the common modules/sub-modules which are part of an already endorsed licence category/sub-category.

- Extension of the validity of the basic examinations may be performed for another 10 years by granting examination credits (comparison between initial Part-66 Appendix I syllabus when exams were passed and new syllabus at the time of granting credits) (66.A.25(c)1 and (d)).
Recent experience:

- **66.A.30(d):**
  - At least 1 year of the required experience shall be recent (except for additional categories/subcategories where it shall be at least 3 months).

- **AMC 66.A.30(d):**
  - 50% (6 months) of the required 1 year recent experience should be within the last year before licence application.
  - The remaining recent experience (6 months), should be within the last 7 years before licence application.
  - The remaining experience (as required by 66.A.30(a)) must be within the 10 year limit.
Basic examination after a failed module (Appendix II, points 1.11 and 1.13):

- Waiting periods for each set of 3 consecutive attempts:
  - 90 days after 1st attempt.
  - 90 days after 2nd attempt.
  - 1 year after 3rd attempt.

NOTE: The 90 day waiting periods may be reduced to 30 days when additional training is provided by a Part-147 organisation in the area where the candidate failed.
Time limits for Part-66 licence application

» **Type rating training and On the Job Training (Appendix III, points 1(a)(iv), 1(b)(v) and 6):**

  - Theoretical training (+ examination), practical training (+ assessment) and On the Job Training (when required) must have been started and finished within 3 years prior to application for licence endorsement.

» **Type examination and experience (Appendix III, point 5(h)):**

  - Examination + practical experience must be completed within 3 years prior to application for licence endorsement.

  - Waiting periods for each set of 3 consecutive attempts:
    » 30 days after 1st attempt.
    » 60 days after 2nd attempt.
    » 1 year after 3rd attempt.
Examination credits (66.A.25(c) and (d), 66.B.400, 66.B.405 and 66.B.410):

- Extension of the 10-year validity of the Part-66 basic examinations may be performed for another 10 years by granting examination credits (upon applicant request). This requires the preparation of a credit report comparing the initial Part-66 Appendix I syllabus applicable when the exams were passed with the new syllabus at the time of requesting credits.
“Type training”
Appendix III describes all the requirements for:

- **Aircraft type training:**
  - Theoretical training and examination:
    - General (point 1(a)).
    - Theoretical element standard (point 3.1), including objective, level, duration and content.
    - Examination standard (point 4.1).
  - Practical training and assessment:
    - General (point 1(b)).
    - Practical element standard (point 3.2), including objective and content.
    - Assessment standard (point 4.2).
  - Differences training (point 1(c)).

- **Type examination standard (point 5).**

- **On the Job Training (point 6).**
Type training

Fundamental aspects of type training:

Type training is composed of theoretical and practical element.

The theoretical element:
  - has a minimum duration (depending on the licence and the aircraft category), with some flexibility. The final duration must be justified by a training needs analysis (TNA). See points 3.1(c) and (d) of Appendix III.
  - Must have a content following the Table contained in point 3.1(e) of Appendix III.

The practical element has a fixed content (50% of the tasks listed in the Table in point 3.2(b) of Appendix III, relevant to the aircraft type). There is no duration defined.

Each element can be performed by a Part-147 organisation or as directly approved by the NAA.

The theoretical and practical elements should address the different parts of the aircraft representative of the structure and the systems/components (AMC to Section 1 of Appendix III).
Fundamental aspects of type training (continuation):

- Aircraft type training may be subdivided in airframe and/or powerplant and/or avionics/electrical systems type training courses (AMC to Section 1 of Appendix III).
- Practical training:
  - may be performed after or integrated with the theoretical element. However, it should not be performed before (AMC to Section 1 of Appendix III).
  - may include instruction in a classroom or in simulators, but part of it should be conducted in a real maintenance or manufacturer environment (AMC to Paragraphs 1(b), 3.2 and 4.2 of Appendix III).
  - the duration has to ensure meeting the content required by paragraph 3.2 of Appendix III. Nevertheless, for aircraft equal or above 30000 Kg MTOM it should not be less than 2 weeks (unless properly justified) (AMC to Paragraphs 1(b), 3.2 and 4.2 of Appendix III).
- for powerplant and avionic systems, it may be sub-contracted by the Part-147 organisation (AMC to Paragraphs 1(b), 3.2 and 4.2 of Appendix III).
**Type training**

**Fundamental aspects of “On the Job Training”:**

- On the Job Training is not part of the Type Training.
- On the Job Training is required for the first aircraft rating in a licence category/sub-category.
- However, it is not part of the Type Training and cannot be provided by a Part-147 organisation. It must be performed at and under the control of a Part-145 or Subpart F maintenance organisation.
- It is approved by the NAA issuing the licence.
- Should include one-to-one supervision and involve actual work task performance on aircraft/components. Simulators should not be allowed (AMC to Section 6 of Appendix III).
- Should cover 50% of the tasks of Appendix II to AMC applicable to the aircraft type and licence category. Some tasks should be selected from each paragraph. Other relevant tasks not in the list may be performed as an alternative (AMC to Section 6 of Appendix III).
- Up to 50% of OJT may be performed before the theoretical element (AMC to Section 6 of Appendix III).
Fundamental aspects of “On the Job Training” (continuation):

- The procedures for OJT should be included in the Exposition Manual of the approved maintenance organisation (chapter 3.15, see AMC 145.A.70(a)). They can only be used when the licensing authority is the same as the competent authority of the maintenance organisation. In other cases, it is up to the licensing authority to decide whether it accepts such procedures for the purpose of approving the OJT.
Type training

Training Needs Analysis (TNA):

- Introduced in point 3.1(d) of Appendix III and corresponding AMC.

- Applicable to the theoretical element of courses either carried out by Part-147 organisations or directly approved by the competent authority.

- Required in order to justify the duration of the theoretical element of the type training.
The TNA is the main driver to determine the duration of the theoretical element of the type training, regardless of whether it is above or below the minimum duration contained in Appendix III.

The purpose of the table of minimum duration is to provide a reference both to the organisation and the competent authority of what to expect as an average for the corresponding category of aircraft. Indicates also to the authority the level of detail of the scrutiny to be performed. For example:

- The average duration for a course of an aircraft above 30000Kg MTOM is 150 hours.
- A proposal for a course on an Airbus 380 or a Boeing 747 of 150 hours may require a close look to the TNA, because most likely the course may need a longer duration.
- A proposal for a course on a Learjet 45 of 120 hours, even when it is below the minimum duration (average for the category) may be easily justified by the TNA and may not need such an in-depth investigation.

The content and duration deriving from the TNA may be supported by an analysis from the TC holder.
Type training

Key aspects of the TNA:

- It takes into account (among other aspects):
  - The particular aircraft type, applicable systems, maintenance needs and operational experience.
  - The corresponding Instructions for Continued Airworthiness and other maintenance documentation available.
  - The learning objectives (what is expected to be achieved by the student taking into account the content and level of training defined for each licence category in Appendix III).
  - Appropriate coverage of typical tasks (removal/installation, testing, servicing, inspection, troubleshooting, etc).
  - Sequence of learning.
  - Instructional methods.
  - Documentation and resources available to the student.
  - The maximum number of training hours per day (recommended 6 full hours excluding breaks, examinations, aircraft visits, etc).
  - Minimum participation time from the student (not less than 90%)