

Training in Change – Modern Occupations for the Third Millennium

Memorandum of understanding on the revision of training occupations in aviation technology

**Agreed between BDLI, IG Metall and ver.di
in cooperation with the Bundeswehr and
the Verband der Arbeitnehmer der Bundeswehr**

1. Qualification of employees – a crucial factor for competitiveness

The social partners are convinced that the competence and professionalism as well as the experiential knowledge acquired by the skilled workers in the aeronautics and space industry are a crucial prerequisite for safeguarding the enterprises' competitiveness and capability for innovation. They are also an important starting point for securing existing areas of employment and identifying new ones. Accordingly initial and continuing vocational education and training is the key to success, benefiting the employees as well as the enterprises. A future oriented and demand driven training policy in the aerospace industry is a key factor for keeping the sector future-proof.

Given the necessity of continually developing the workers' employability as well as their ability to take part in shaping processes of structural and technological change in the aerospace industry, learning an occupation is the starting point for the continuing professional competence development of skilled workers. The mission of initial vocational education and training is to give the learner a sound preparation, in terms of professional as well as personal competence, for lifelong learning.

2. Occupations – the guiding principle for the modernisation of training

The social partners reaffirm their commitment to the integration of career oriented technical, social, organisational and methodological competences in holistic occupational profiles. The learners are to be trained in recognised aerospace occupations on the basis of transparent curricula that are standardised nationwide and developed by consensus of the social partners. The structure of the qualification profile should facilitate and support mobility between occupations, enterprises and economic sectors at the national as well as the international scale. This is essential for safeguarding the employability of workers as well as increasing their flexibility within the enterprises.

3. Objectives of the revision

(3.1) The aim of vocational education and training is to enable the learner to exercise the trained occupation independently as well as in various forms of teamwork. Skilled work is characterised by a broad integration of tasks and a high degree of self-organisation of the work.

(3.2) The altered characteristics of skilled work include especially process orientation, responsible behaviour in the context of quality management, autonomous disposition and time scheduling, English language skills, improved IT competence, increasingly independent planning, and managerial skills. The future contents of training regulations and curricula will take into account these changes in technology, work processes and work structures. The guiding

principle of the complete action – independent planning, exercise and monitoring (holistic qualifications) – will be observed and developed further with a view to the process competence requirements of skilled work.

(3.3) The objective of the revision is the compliance of the final examination held by a Chamber of Industry and Commerce with the requirements of the aviation authorities (LBA/EASA) and the full recognition as a prerequisite for acquiring the CAT A license as well as credits for CAT B1 or, respectively, CAT B2 of Part 66.

4. New occupations and their structures

The existing occupations of

- aircraft mechanic with specialisations in manufacturing technology, maintenance technology or engine technology and
- electronics technician for aviation systems

will be reorganised and given a uniform structure.

The decision whether the occupation of aircraft mechanic will feature specialisations or, alternatively, areas of activity will be made in the curriculum development process when all competence areas related to this occupation have been surveyed and the commonalities between them have been analysed.

Both training occupations in aviation technology include identical training contents for at least 12 months within the total training period. In the event of relevant skills needs additional training occupations in aviation technology can be defined, provided that these new occupations also include at least 12 months of identical contents.

The occupations are organised according to competence areas.

5. Competence areas

By “competence areas” the signatories of this memorandum of understanding mean the reasonable combination of single competences that are required for the professional exercise of typical professional work tasks in clearly defined work contexts (e.g. Assembly and disassembly of equipment and systems in/at the aircraft airframe). Competence areas describe single components of an occupational profile but do not constitute self-contained qualifications like modules. The professional qualification consists in the mastering of all competence areas.

6. Shared qualifications

In order to promote the professional mobility and flexibility of the employees, the target for the occupation of “aircraft mechanic” is to define shared competence areas (core competences) with a volume of at least 21 months, dispersed over the entire training period, and to lay them down in the training regulation.

7. Internal flexibility of training occupations instead of fragmented modularisation

Apart from the shared qualifications the curricula will also include additional competence areas whose learning sequence may vary (technical competences). The competences that be-

long to the competence areas are defined in accordance with the requirements that have been identified for the reality of skilled work, and they shall be learned predominantly through work processes in adequate areas of business activity. This includes also the integrated acquisition of qualifications/competences from other competence areas.

The timetable of the training curriculum will be set up according to the timeframe method of the current curriculum for electronics technicians for aviation systems.

8. Structure of the examinations

The assessment takes place in the form of an extended final examination. The examination consists of two parts. It remains to be clarified whether and to what extent it is possible to organise already Part 1 with a view to the assessment of professional acting competence.

With regard to the assessment area of “work assignment” Part 2 of the final examination consists of a company order that has to be documented by means of practice oriented files. The assignment-related technical discussion serves to assess the candidate’s competences with regard to the processing of the order.

In the other assessment areas the candidates have to work on holistic action-related tasks. Multiple choice tasks should be excluded because they are not appropriate for the assessment of acting competence.

9. Training period

The training period is fixed at 42 months. The training occupations in aviation technology comprise an extraordinarily broad range of competences. The training period is justified by high-level safety and quality requirements as well as the integration of license requirements as explained at point 3.3.

10. European competence

The descriptions of competence areas and the related competences in the curricula aim to contribute to the transparency of training contents, thereby paving the way for undergoing parts of the training programme in other European countries and earning credits for the related training contents.

The social partners are in favour of international exchange programmes for apprentices and recommend enterprises to participate in such programmes.

In order to respond to the Europeanization and internationalisation of (labour) markets, the training regulation needs to make technical English mandatory for all occupations. The social partners expect vocational schools and training enterprises to show a commitment beyond the mandatory courses. The training programmes should also aim to promote the understanding of other cultures.

11. Training curriculum for classroom and workplace

In order to improve the cooperation between the learning venues, i.e. the vocational school and the training enterprise, measures will be taken to have the KMK involved in the revision procedure as early as possible. In the course of the revision procedure, the experts of the fed-

eral and *Länder* governments have to strive for a better coordination of their work. Especially the descriptions of the competence areas for class and workplace should be largely identical.

12. Access to training

In principle the training curriculum must be structured in such a way that school leavers with a qualification equivalent to the present *Hauptschulabschluss* (leaving certificate of the secondary modern or junior high school) have a fair chance to succeed in the training programme. The social partners support pre-vocational courses for those school leavers who do not yet meet the requirements for achieving a vocational qualification in a training occupation in aviation technology. To this end enterprises will cooperate with appropriate training providers. They will also provide assistance by supplying internships. The social partners recommend that subsequently to the pre-vocational courses enterprises should give the young people the opportunity to undergo training in a recognised occupation, and to have accredited their prior learning if applicable.

13. Support for the introduction of the new occupations in aviation technology

A modern reorganisation of the training occupations in aviation technology with a view to the acquisition of acting competence makes it necessary to survey, with high validity, the actual competence areas of skilled work in the various business areas and enterprises of the aerospace industry, and to mirror these competence areas in the curricula. The social partners expect the Federal Ministry of Economics and the Federal Institute for Vocational Training to support these efforts. Major achievements, however incomplete, have already been made in the context of a completed pilot project of the Federal Ministry of Education and Research with the support of the Institute Technology and Education in Bremen.

The revision of occupational profiles as well as the creation of new ones in the course of the revision procedure at hand needs to be supplemented by a joint communication strategy of BDLI, IG Metall and ver.di. This includes the preparation of implementation aids, guidelines and examples for workplace assignments, regional information events for trainers, teachers and examiners, and the utilisation of new media.

14. Implementation

BDLI, IG Metall and ver.di will speak out for the contents of this memorandum of understanding to be supported by the German Confederation of Trade Unions (DGB) and the trade unions affected by the reorganisation of occupations on the one hand, and by the professional bodies and business associations participating in the German Employers' Organisation for Vocational and Further Training (KWB) on the other.