ECVAET 3 – The European master craftsperson education and training in event technology

Results and recommendations

for a European master craftsperson education and training

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Note: In view of an easy readability, gender-specific descriptions are mostly in masculine form only but of course, they include male and female persons.

Contents

1. Introduction

Ensuring the integrability of educational offers is a core task in the European vocational education and training. To promote the mobility of manpower in Europe and stem the complex bureaucratic procedures, the qualifications and competencies acquired in the national educational system should be usable without barriers abroad particularly on the European labour markets as well as in the educational system of other countries. Also vice versa, acquired skills abroad should find unbureaucratic and efficient recognition in the national educational system. The current established recognition procedures and equality aspirations of the European vocational education and training are supported by European transparency instruments. The European Qualifications Framework (EQF) or a possible merit point system in the vocational education and training (ECVET) serves as translation assistance.

It is evident throughout Europe that the transparency of the educational system is continuously improved. An example for this is the established bilateral agreements between individual countries in the field of vocational education and training/apprenticeship training. A mutual formal recognition, however, does not form yet the desired equality on the labour market. The national differences of vocational education and training are too big. Moreover, learning in work process does not represent a central, often traditional aspect in all European countries and their educational systems. Imparting of a comprehensive vocational competence in handling is however the goal of every vocational education and training. The requirements of labour markets and the need of the stakeholders at the labour market, to acquire skills, knowledge and abilities which allow proving oneself on the labour market successfully, are the central points of orientation in the vocational education and training.

This represents special requirements for those sectors which frequently practice cross-border activities. So, for instance, in the fields of events and meetings which frequently accompany international productions like e.g. music, sport and leisure events on their tour in Europe or were even conceptualised for transnational activities. In addition to professional and technical qualifications, safety technical and legal aspects like national applicable norms, rules, statutory orders and regulations have to be considered frequently. Even event sites abroad are repeatedly confronted with international professionals, whose qualification is neither easy to classify in the national education system nor do they fulfill the national requirements. The lacking transparency in the vocational education and training trims the required flexibility in international employment of professionals.

1.1. Starting point

This especially applies–for vocational education and training in event technology. Here in Europe, different types of education exist as well as hardly reciprocal recognition between countries. It shows that more and more and better or higher qualified specialists in the event technology are in demand on the labour market. Particularly the international setting, e.g. at big events on which more nations participate, needs an enormous number of specifically trained experts in the field of event technology. These (frequently) cross-border events (like e.g. the European Handball Championship in cooperation with Liechtenstein and Austria, Football World Championship Switzerland-Austria, Europe tours, etc.) require the possible employment of professionals in accordance with international flexibility and conformity with the law. The creation of transparency in the field of education, training and continuing

education in this professional field, is the first requirement for the beginning of a Europe-wide, reciprocal recognition of qualifications and a real equality on the labour market. It contributes considerably to intergovernmental recognition of persons trained in event technology and paves the way for international exchange of professionals during the educational phase, later by international cooperation of tradesmen and trade associations in the sector. The second requirement is the facilitation of a transnational exchange of professionals as prepared in ECVAET and continued in ECVAET 2[1].

Extending the results from both projects is intended with the present project ECVAET 3. It is aiming for professional training in event technology, concretely for the master craftsperson education and training. It became apparent from preliminary surveys on the project, that the master craftsperson qualification for event technology is available only in Germany; an industrial master school for handicrafts exists in Austria while Switzerland and Liechtenstein have no comparable education yet. The demand for professionals, who possess the qualifications with higher responsibility for the fulfillment of high level tasks like the management of projects and professionals at international productions, is growing steadily. In the absence of national resources through lack of measures, the large specialised companies in Liechtenstein and Switzerland for example are currently hiring professionals for event technology from the German market. However, this transnational exchange of professionals is not always in conformity with the law, since the involved professionals do not possess the knowledge and training in country-specific norms, statutory orders, laws, etc. This confronts the stakeholder with challenges in particular cases.

For this reason, the safety relevant field of this education and training presents an essentially important aspect in the event technology. It is therefore necessary to consider the international and national legal norms and basic conditions, since the differences on national level between federal countries or cantons are already a great challenge for the stakeholders of event technology. The focus in every event and particularly in big events is the safety of visitors, participants, skilled workers and performers. The responsibility to ensure this for them, or the involved professionals on the event, is always signed to the person with the highest level of education. Responsibility, however, cannot be assumed neglectfully.

1.2. Goal of the project ECVAET 3

The project ECVAET 3 presents a consecutive development of the successful ECVAET project series concerning the next educational training and qualification phase in event technology, the master craftsperson education and training. The innovation in the current project is to close the gap in all countries where educational training on master level is not available (or comparable for every country which has no knowledge of master craftsperson education and training) by conceptualising a European master craftsperson education and training based on the results from ECVAET and ECVAET 2 and in cooperation with stakeholders of the sector and the formal education system. The presentation is based on the available and further matrixes to be developed out of the preceding projects regarding the professional activities and safety issue in the event technology.

[1]ECVAET and ECVAET 2 are European projects, conducted in the programme "Lifelong Learning" from 2011-2015, details are available at www.ecvaet.eu und www.ecvaet2.eu

A further innovation which has been developed as part of the project is a model, how a higher professional specialised training like the master craftsperson education and training can be portrayed in the context of the European transparency tools. This can be implemented even on college-/university level in view of cooperation with a consecutive study or further education programme.

A first preliminary survey in Germany has shown that in higher specialised educational training, the main emphasis lies on management skills which are taught in a consecutive bachelor or further educational training like e.g. CAS and DAS programmes (so-called certificate programmes) and are offered until the master courses in the higher education system. First realisations of such dual programme already exist on the markets, so, for instance, at Niederrhein College where the trial study course "handicraft management-business management" B.A., connecting a handicraft apprenticeship, master craftsperson continuing educational training, and business management studies, was launched for winter semester 2015/16. After ten semesters, the graduates shall be awarded a Certificate of Apprenticeship, Master Craftsperson's Certificate and a Bachelor of Arts.

1.3. Project organisation and course

The present project was developed and improved substantially on March 2015 for submission in the European promotion programme ERASMUS+. The project plan intended the partners to work together in consortium on the project goals (see Annex 1) from October 2015 to September 2017. The project course is subdivided into work phases analogous to the developed results, the so-called intellectual outputs (IOs). The relevant activities and work steps in that respect were:

- **IO1: Communication and dissemination**
  At the setting of the project goal, communication plays a central role from the beginning to the end concerning the dissemination, as it is aimed to approach as many stakeholders as possible in this professional field and convince them from the idea of a European master craftsperson education and training. During the project course additional major points were included in the present project serving as a valuable contribution to the survey on the needs of the sector and collaboration of stakeholders of the sector.

- **IO2: Survey of offers and analysis of the needs of the sector**
  The preparation of a study report on the analysis of further educational training offers in Austria, Germany, Switzerland, and Liechtenstein was the goal of this work phase, linked to the following activities:
  - Research in the partner countries on:
    vocational advanced training for master craftsperson of event technology (or comparable courses): collection of educational regulations, curricula;
  - Presentation of educational pathway against the background of each (professional) educational system in the partner countries, presentation in EQF/NQF, documentation, reporting
  - Field research/qualitative interviews with stakeholders (e.g. management of educational institutions, responsible persons of relevant boards and associations etc., event technicians, customers)

- Ascertainment of required competencies for the master craftsperson profession, surveying of the satisfaction of stakeholders regarding education or persons who have absolved the respective education, evaluation of the opportunities on the labour market;
- Surveying of the educational regulations and fundamentals in the countries through inquiry, interviews and presentation of educational channels against the background of the respective professional and educational systems in the partner countries, documentation, reporting of expert surveys

- **IO3 Development of a competent matrix for the European master craftsperson education and training**
- **IO4: Development of a safety matrix for the European master craftsperson education and training**

  In the centre of the activities referring to the matrixes stand the identification and needs of the necessary competencies (knowledge, skills, abilities) as required by the sector according to the survey phase in a master craftsperson education and training in event technology. These were presented as a supplement in the assumed competence matrix activity from ECVAET and ECVAET 2, identified through the sector's required and necessary competencies regarding safety aspects in event technology and presented in regard of the master craftsperson qualification and supplement/further development of the assumed safety matrix from ECVAET and ECVAET 2. Thereby, the following aspects were considered:
  - The competence matrix for the master craftsperson profession in event technology is formulated supplementary by using the VQTS-principles on presentation of a competence matrix.
  - The presentation process of the competence matrix is designed in such manner that an education and training plan and concrete modules for the design of training and training phases can be derived in accordance with the implementation of the ECVET-concept
  - The safety matrix supplements the competence matrix by the analogous presentation of relevant safety aspects on competence fields.
  - The results from the previous survey phases are incorporated in the design of both matrixes: Contents of educational regulations, job descriptions and curricula from the four partner countries are used.
  - Additionally, incorporated are the results from an interview phase which supplement the "job description" master craftsperson in event technology about required competencies and safety aspects which have not been included in education until now or haven't been adequately implemented.

- **IO5: Education and training plan and training modules for a European master craftsperson**

  From the findings of the previous work steps, an education and training plan for the European master craftsperson of event technology was developed, supplementary to the vocational education and training, for the professionals of Event Technology (ET) from Austria, Germany, Switzerland and Liechtenstein. Derived thereof and as proposal to future

educational training institutions, individual further training modules were developed for implementation.

- Development process of the education and training plan is designed in a manner that concrete modules for the design of further educational training measures can be derived in accordance with the implementation of ECVET concepts.
- The results of the previous work phase are incorporated in the design of the modules: updated contents of educational regulations and educational curricula are used, and the qualifications as shown in the transparent presentation through use of the matrixes are identified as well.
- Additionally, and to the extent possible, the national education institutes and educational training experts of Event Technology (ET) will be engaged in the design process. The development of the education and training plan based on the transparently made educational requirements on existing master craftsperson education and training programmes was carried out in 3 work phases;
  1. Description of learning results of the identified differences in education in event technology (ET)
  2. Formulation of learning modules based on the learning contents from regulations
  3. Development of procedures for validation and recognition of learning results

- **IO6: Findings and recommendations from the project**
  This work phase included the presentation of findings and recommendations from the project in the form of the present report.

Many discussions and round of talks with stakeholders were carried out already during the project period, and different interim representations were held at trade fairs like the ProLight& Sound 2016 and 2017 in Frankfurt, the Meet in Vienna or also different events like e.g. the management-trade conference of EVVC – European Association for event and convention centres. During the project period, many articles were published in newspapers like the VPLT-magazine, VPLT Newsletter, the journal prospect of OETHG, and in the folio of BCH as well as in the BCH-Newsletter of BCH, Swiss Vocational Education and Training. Two so-called multiplier events were carried out as a highlight of the project dissemination, such as the trade fair ProLight& Sound in Frankfurt in April 2017, where a stand was used for demonstration during the entire period of the fair in Frankfurt in April 2017, and a result presentation with subsequent podium discussion carried out at the Liechtenstein University, Vaduz in August 2017.

2 Concept of a European master craftsperson education and training

The master craftsperson education and training represent the highest professional education and training in the EQF-system, equivalent to the Bachelor from the college education of EQF-level 6, however, with essentially stronger practical relevance. Further possibilities of education and training in event technology on EQF levels 6 and 7 (Bachelor and Master) exist at universities of applied sciences, colleges and universities. However, essential technical competencies are not imparted here anymore, but these advanced qualifications or higher qualifications on university-level offer additional knowledge and competencies for the fields of management and scientific activities. Particularly in the master craftsperson education and training, main emphasis on professional-practical and manual skills is laid.

The terms master craftsperson and master craftsperson education and training have been established mostly in German speaking regions, as a supplement for the vocational education and training of apprentices and based on this vocational advanced training, also called professional education and training (PET). There is a need to clarify these terms for a European education outside the German speaking region since not all European countries have or rather know a nationally implemented similar system of dual education.

2.1. Professional education and training in Europe

In many countries, the education on the tertiary level is limited to the study course of universities and universities of applied sciences. These include Bachelor, Master and doctorate programmes (PhD). Moreover, there are the so-called certificate courses known as CAS (Certificate of Advanced Studies), DAS (Diploma of Advanced Studies), MAS (Master of Advanced Studies) and postgraduate studies. In countries which follow the system of apprenticeship training nationwide, a professional education and training (PET) was established parallel to academic education in form of a broadly expanded vocational advanced training which is based on the vocational education and training. Naturally, these educational training courses have also different descriptions in various countries.

In comparison to an academic education, a vocational education is strongly marked by national or regional conditions formulated e.g. by specific laws, regulations, norms and guidelines which can even differ from state to state or canton to canton. Additionally, there are differences regarding the enforcement of compliance of these conditions. While it is legally prescribed in a country which qualification must be met for a specific task, in other countries, the responsible person is referred to only in case of damage, when persons without expected competencies for the field of activity were employed.

2.1.1 Certificate courses

The term certificate course is understood to mean an education which leads to a qualification for a specific task or operation of special devices, like e.g. in event technology in rigging or operating of forklifts. These courses are usually offered by private providers who also issue the certificates as proof of knowledge and qualification. These certificates have mostly no governmental recognition, but a high acceptance in the working world depending on the region. Certificates are even required for certain

activities. In-company training could be counted to these courses, even if they are completed with an internal certificate.

2.1.2 Specialisations

Many training courses in professional education and training lead to a (technical) specialisation in a specific area of the vocational field like e.g. audio technology or video technology in event technology. These degrees are governmentally recognised in some countries like e.g. in Switzerland and Liechtenstein through professional examination. They are also classified in the National Qualification Framework (NQF), mostly in level 5.

2.1.3 Master craftsperson education and training, master craftsperson qualification

Educations and qualifications which lead to a comprehensive managerial competence in professional field are being described in some countries as master craftsperson education and training. In previous training in the event technology, the competence is focused on the organisation and management of event. In case of big and complex events, the management can be supported by field specialists. That means that technology is lesser in focus, but more the management task. On the other side, the technical knowledge has to be sufficient in order to evaluate the quality of the installation and the compliance of regulation, and if necessary to order measures. Master craftsperson education and training or master craftsperson qualifications have different descriptions and lead in EQR usually to level 6. The following descriptions are being used:

DE: Certified Master Craftsman for event technology
AT: Master Craftsman's Exam/Master Craftsman's qualification test, Foreman event and event technology
CH: Examination for Advanced Federal PET diploma or College of Professional Education and Training (PET)

There are still many further educational courses without degrees, but that shall not be discussed here further.

2.2. From competence to qualification

A common understanding of the main terms builds an important foundation in the preparation of education elements and particularly in work groups with international stakeholders. The project consortium could determine within the scope of the project the presented term definitions below which were developed in accordance with the language usage in European communications and in coordination with the sectors. That refers particularly to the terms competence, qualification and function. In the following, these descriptions are defined by how they are understood by the project consortium; the graphic clarifies the interaction of the central terms.

Competence describes the ability to use available knowledge and skills as well as personal, social, and/or methodical abilities particularly for problem solving, and the willingness to do this (professional ability to handle). Competence can be proven through available certificates or learnt knowledge, skills and abilities, and can be used in different working, learning and other living conditions.

A formal **qualification** is the formal result (qualifying certificate, attest, diploma, certificate, reference or title) of an evaluation and validating procedure to determine the available competencies, measured and certified by a responsible office or authority in accordance with the applicable standards. A formal qualification can be the requirement for practising a profession, an activity or a function.

A **function** is a (e.g. professional) job or position with clear-cut task, activity and responsibility which somebody holds in a larger context. The corresponding competencies and, if necessary, a formal qualification are required for the practising of a function.

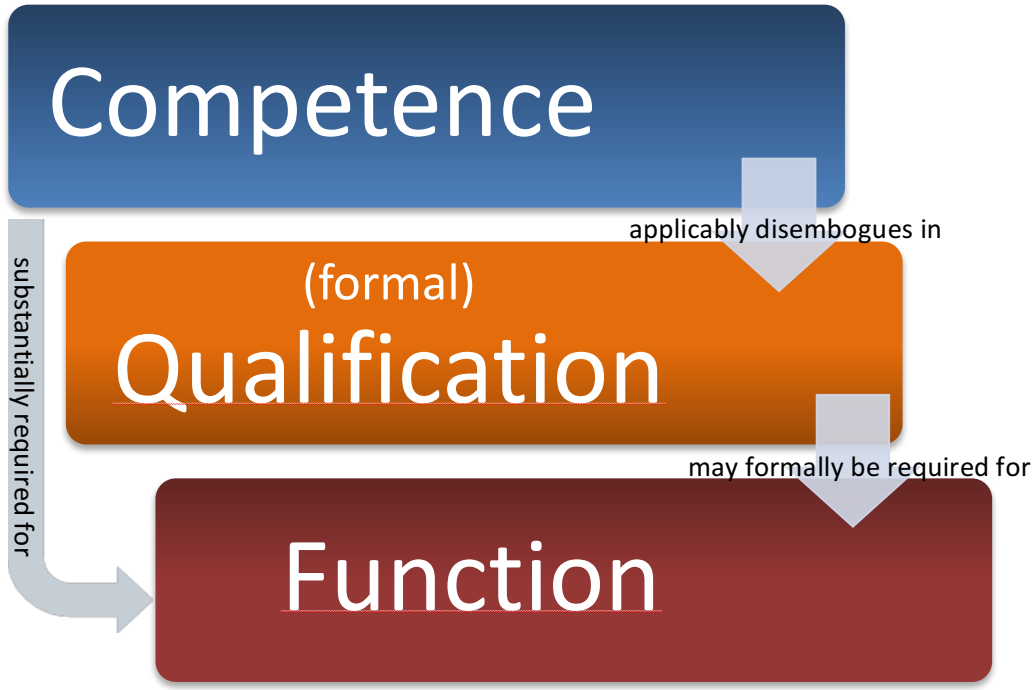

Figure 1: Interaction competence – qualification - function

Vocational education and training courses usually aim at supporting competencies. In the professional education, a qualification has to be provided in form of a certificate by means of examination and proof of the result that the defined competencies are available. This proof is based on a formal qualification procedure carried out by an authority or other responsible office in accordance with applicable standards including evaluation procedures. This applies for the "Master Craftsman of Event Technology" in Germany, or the "foreman for entertainment and event technology" in Austria. The function and its description are allocated by a commissioner/employer. Examples for that are the "stage and studio professionals", "responsible for event technology", "technical manager", "electrical specialist for event technology". Corresponding competencies are required in order to fulfil a specific function. For some activities the required competencies have to be formally proven through a qualification.

2.3 Requirements and positioning of the master craftsperson

The **consideration of national laws**, regulations, rules and norms is a central requirement for the development of uniform European regulations in event technology. The competencies of a European master craftsperson in event technology require besides expert knowledge and skills the knowledge

of numerous country-specific conditions, particularly regarding these regulations, to be able to fulfil the tasks responsibly. That's why the educational training for a European master craftsperson in event technology has to include elements that consider these requirements.

Different educational systems of countries are a further challenge. This begins with the different descriptions in the professional further educational training, and it also concerns those authorities which are responsible for educational training and qualification.

In the existing project, a way was chosen in which not a superordinate regulation should be created, but the conceptual framework including the minimum competencies as reference for the master craftsperson education and training in event technology. From this conceptual framework, the individual countries can derive "their" educational training regulations and enlarge with country-specific aspects. Diverse regulations can exist that way, which are largely conform in the general, professional field and can therefore be described as European compatible. At the same time, this offers the educational institutions the possibility to realise a common master craftsperson education and training in event technology in form of a cross-border educational training association, which can lead to a qualification in the involved country.

In the regulations of each country, it should always stay clearly evident which parts come from the conceptual framework as generally binding and which parts include the country-specific supplements. Thus, the cross-border mobility can be promoted in the future because it is then apparent which supplements are required in order to work equally in other countries.

Concerning the positioning of the master, the differentiations as well as specializations with regard to the related professions should be considered. Especially in event technology, there is a strong professional mobility, which means that persons from similar professions are working in the field of event technology (and vice versa). Therefore, it is the task of a master craftsperson in event technology to guide this manpower correctly and control the implementation of the tasks appropriately. It clearly shows that the specialised knowledge and abilities of specialists can go further beyond than in case of master craftsperson. Finally, he/she has to ensure that the work of the specialists is introduced in the entire context of the production.

Specialisations in event technology are often differently described in individual countries. In the following schedule, some examples are cited incompletely, as well as presented with regard to related professions in event technology.

Table 1: Specialisations in event technology and related professions

Competent area according to matrix	Examples of specialisation	Related professions
Audio technology	Audio technician and audio master craftsperson	Acoustician, building acoustician
Video technology	Broad area: film, video art	Film industry: cameraman, cutter (editor)
Lighting technology	Lighting technician	Film industry:
Mobile stage construction	Engineering experts	Scaffolders
Stage technical equipment	Stage manager, machinist, rigging	Craft professions: Carpenter, locksmith, decorator, painter, etc.
Energy distribution	Electrical specialists	Electro industry
Media integration	IT-specialists (server, networks)	Informatics
Special effects	For special effects there are certified training courses	Demolition expert
Logistics	Logistics specialist	Logistics

At big events the special areas are managed by specialists as a rule while the organization and coordination of their activities rest on the master. That includes particularly the entire planning, employment of labour, appointments, costs, safety measures and others. The master craftsperson education and training is mainly focused on the planning, organisation and carrying out of events.

3 Requirements of the labour market

Educational attainment in professional education and training/higher educational qualification corresponds always only to the actual stand of knowledge of the industry at the time of achievement. Occupational oriented further education and training are for this reason indispensable in order to be able to stay up to date. Additionally, an international labour market with further requirements and demands is increasingly developing in Europe, which has to be considered in the development of a future-oriented vocational education and training. To obtain a detailed picture of the labour market for event technology, a well-founded confrontation with these requirements on vocational education and training was required in the project.

3.1. Starting point

It is also shown in the sector of event technology that information technologies and digitalisation have significantly changed the working conditions and design possibilities. Similarly, the requirements and expectations from the people working there are increasing as for example, occupational advancement or the chance to take managerial tasks is and will be possible only for those persons who possess an up-to-date and comprehensive qualification.

Germany already reacted in 1997 by creating a corresponding basis with the master craftsperson qualification for event technology. Moreover, initial vocational training possibilities as well as further education and training on relevant subjects are offered, among others, at the universities of applied sciences.

The numbers of the Chamber of Industry and Commerce show[2] that the master craftsperson qualification is a favorite educational training and the success rate (passed examinations) of master craftsperson of event technology lies at around two thirds.

Table2: Graduates of qualification "Master Craftsperson of Event Technology" in Germany 2013 - 2015

	Entrance (Persons)	Passed			Success rate
		Total	Female	Male	
2013	250	158	12	146	63 %
2014	266	166	13	153	62 %
2015	255	168	12	156	66 %

In ***Austria*** a total of 68 persons[3] between the years 2010 and 2017 have completed the Foreman school for event and event technology (*WerkmeisterschuleVeranstaltungs- und Eventtechnik)*. The qualification as technical executive is desired increasingly. However, not only the acquisition of special competencies is essential, but interdisciplinary competencies, particularly the handling competencies, are equally appreciated by national and international companies. A master craftsman qualification is possibly conceivable in the future due to globalisation, digitalisation and ecological focus. Currently, a classification of foreman qualification in the National Qualification Framework is being pursued

[2]Source: German Chambre of Commerce and Industry, compiled by VPLT

[3]Figures of the Academy of the Austrian Theatre Technical Association (*ÖsterreichischeTheatertechnische Gesellschaft – OETHG*)

In ***Switzerland***, it is only since 2011 that a vocational education and training in event technology associated with the description "event professional", providing around 40 graduates[4] yearly, has existed. Before 2011, there was only a further education and training with the title "event technology" available for this occupational field, which is now replaced by the vocational education and training. In Switzerland, a new continuing vocational education and training is based on the mentioned vocational education and training is planned. At the moment, the content of this continuing education is still being processed, particularly on the question whether this should be a specialisation (examination for diploma of professional education and training/PET) or a master craftsperson education and training (Advanced Federal Diploma of PET). Whether enough students for this continuing education and training can be found is also a challenge to be met.

3.2. Concept of the survey

To determine the actual requirements of the labour market on the education and training as a European master craftsperson in event technology, surveys on the stakeholder of the sector were conducted. For the survey of the most important competencies, a two-step procedure was chosen. At first, qualitative interviews of experts with stakeholders of the sector were conducted in a limited scope and in a further sequel; a wide-ranging online survey (quantitative) with experts, entrepreneurs, training officers, and others of event technology, was implemented in the partner countries.

By means of the qualitative interviews, basic ***contents, competencies,*** and ***orientations***, which are important for a European master craftsperson education and training, were raised in January 2016. In summary, the following issues were dealt with:

- Practical and theoretical competencies
- Manual skills
- Safety-related topics
- Legal basis
- Project and quality management
- Commercial or business sector
- Soft skills
- Training of apprentices
- Foreign language
- Further education and training

Qualitative, guided interviews which enable the interviewee to talk, reflect, and allow the inquiry by the interviewer, haven proven to be an appropriate methodical means for it. The interview guideline was created in the project consortium and is based on subject-specific documents and practical experience of the professional experts of the consortium. A total of 30 persons (10 in Germany, 10 in Austria, 10 in Switzerland and in Liechtenstein) with different industrial focus in the event technology were interviewed. The results of the qualitative interviews alone provide significance over important points of a European master craftsperson in event technology. In the two-step procedure, they also serve as preliminary work for the quantitative online survey.

[4]Figures from the Federal Statistical Office, Switzerland

To deepen the meaning of ***knowledge, skills and competencies*** which were raised in the qualitative interviews, and to handle the most important topics in a focused manner, an online survey based mostly on closed questionnaire was created. This was presented to a broad specialist audience in Germany, Liechtenstein, Switzerland and Austria. 214 Persons participated in this survey in April 2016.

For the transfer of the results from the qualitative interviews in the online questionnaires, central points and topic areas from the interviews were summarised thematically. The following important topics were asked in the ***online questionnaire*****:**

- Practical and theoretical competencies
- Competencies in safety area
- Laws, regulations and rules which go beyond the scope of safety area
- Management competencies and soft skills
- Meaning of electro-technical training
- Meaning of professional experience
- Foreign language skills
- Further education and training

To determine the ***intensity*** of the professional-practical, professional-theoretical competencies, management competencies and soft skills as well as competencies in safety area, these were queried in accordance with a multi-step scale. The options were featured as follows:

- Statement whether the respective competence must be learned exclusively without being put into practice directly ("know")
- Statement about whether a master for specific competencies has to be active himself/ herself or technically active ("self-performing" or "implement/observe")
- Statement whether there are also competencies which a master craftsperson can assign to a team member, but still has to control finally ("manage/control").

Qualifying starting point at both surveys was that the vocational education and training (apprenticeship) was already completed.

3.3. Results of the survey

The results of the survey phase are summarised according to the content in this capital, presented as an overview and can be seen in detail in the included analysis report. This is available on the project website under www.ecvaet3.euin the download area[5].

3.3.1 Results of the qualitative interviews

The qualitative interviews delivered the first results showing which areas (contents, competencies) are significant for a European master craftsperson qualification in event technology.

Practical and theoretical competencies concern particularly:

- Sketches and plans (reading, understanding, preparing),
- Stage technology,
- Electronic and power distribution,
- Statics,
- Logistics with planning competence,
- Materials and substances
- Subject relevant software.

Regarding the ***safety area,*** it has been shown that particularly the work safety and health protection of the staff, as well as the safety of artists and the audience are very relevant. Important is not only the knowledge and preparation or observance of these aspects, a European master craftsperson in event technology must for example also be able to react on sudden existing safety defects or can remedy these. Important ***legal guidelines*** are the labour law, laws, norms as well as the guidelines of event technology.

In the field of ***project management***, the planning of schedules, resources and personnel, as well as their implementation and observance are of great importance. Important are also managing competence and the documentation of events.

As ***soft skills,*** communication ability, sense of responsibility and reliability appear to be as indispensable competencies.

The ***examination*** for a European master craftsperson qualification should take place in form of a professional conversation in a national or international, public institution. However, prerequisite for this should be a completed vocational education and training in event technology (or equivalent qualification or certificate, that the competencies were achieved). A work experience of at least three years will thereby be considered as necessary.

[5] In-depth information and analysis can be found in: Seyer-Weiss, S./Gruber, B. (2016): ECVAET 3: The European Master education and training in event technology, report on the survey phase, Vienna: (*Die europäischeMasterausbildung in der Veranstaltungstechnik. Bericht über die Erhebungsphase. Wien*) http://www.ecvaet3.eu/index.php?option=com_content&view=article&id=5&Itemid=141&lang=en

3.3.2 Results of the online survey

Based on the opinion of the interviewed stakeholders, European master craftspersons in event technology should be above all ***technical generalists with management competencies***. Altogether, almost two thirds of all interviewees (table 1) agreed. With 85% approval, it shows that this qualification should be pursued, in any case, only after some time of ***work experience*** in the special field.

Table3: Professional-practical and professional-theoretical competencies

Competence	Category		
	know	Self-perform	manage/ control
Advanced mathematical knowledge for technical calculations	■		
Create sketches and technical drawings for the entire event (also with professional specific software like e.g. CAD and visualizing programme)	■	■	
Planning and dimensioning of power distribution	■		■
Calculate statics/safety of stand of stage construction/rigging	■		
Examine statics/safety of stand of stage construction	■		
Consider strength of materials	■		
Advanced EDP application with media integration	■		
Create multimedia programme	■		
Coordinate multimedia programme in line with the course of event	■		
Consider the network technology in the planning	■		
Plan and configurate broadcasting technology	■		
Plan and configurate video technology	■		
Install and examine audio technology	■		
Plan, install and examine lighting technology	■		■
Use, plan, examine and configurate actual event technology-relevant technologies	■		■
Undertake the technical planning of the entire event (also by means of EDP)		■	■
Material and operating resources: Plan needs, use and reserves			■
Examine materials, operating- and means of work			■
Keep service and maintenance of operating equipment			■
Implement stage construction/rigging in accordance with the planning specifications			■
Stage construction and rigging: Troubleshooting and fault removal			■
Assemble, connect and service event technology systems (regarding audio, lighting, video etc.)			■
Erect and connect non-stationary event technology systems			■
Use or connect event technology systems on high voltage current equipment			■

Table 3 shows the importance of ***professional-practical competencies*** for a European master craftsperson qualification according to the opinion of interviewees. In the questionnaire, an option was given whether the respective competence must be known only without being directly active in it or with it ("know"). "Self performing" means that a European master craftsperson shall or must master the activity completely. "Manage" or "control"means that the master craftsperson takes control over

this activity, however, he himself does not have to be active in it. The interviewees did not have to decide for an option but could indicate more categories. The table is, therefore, to be read as follows:

Example competence "energy distribution planning and dimensioning":
The categories "know" as well as "manage/control"are marked in the table. This should indicate that the European master craftsperson must have theoretical knowledge about how to plan and dimension the power distribution at events. He himself does not have to be able to carry out (this category is therefore not colored); eventually he MAY not also due to his educational training. For this activity, he has to engage ("manage") a professional from the team or an external specialist. It is his further task to monitor or control whether the person who has carried out the activity has correctly finished it in accordance with the safety requirements.

Due to different country-specific requirements on electro-technical competencies for event technicians in the vocational education and training, the question on whether a European master craftsperson must also have electro technology educational training in addition, was especially interesting. In the survey, the majority voted for it, particularly the interviewees from Switzerland and Liechtenstein with 71% saw in it a great significance.

The previous projects ECVAET and ECVAET 2 have already shown that event technicians need ***full safety competencies***.[6] Correspondingly, this applies, specifically, for European master craftspersons (a detailed safety matrix, oriented on the master craftsperson qualification, is available in the annex). In the survey, the stakeholders voted that a European master craftsperson does ***not*** have to ***memorise*** all the safety requirements; however, he should be able to name substantially the important points. The following table shows in detail how the interviewees assess the competencies in the safety area.

Table 4: Competencies in the safety area

Competencies	**Categories**		
	Know	Self-perform or implement/ observe	specify and control
Safety technical instructions for the staff	■	■	
Safety requirements for artists	■		
Safety requirements for the audience	■	■	■
Safety requirements for the building	■		
Important safety requirements of other EU-countries.	■		
Safety requirements for the staff		■	■
Implement safety requirements also against resistance (e.g. event organisers)		■	■
Safety requirement for materials and operating resources	■		■
Communicate safety requirements on those relevantly involved (staff, artists, event organizers, ...)		■	
Recognise and point out safety problems		■	
Remedy safety problems			■
Advice and inform the event organisers about the safety requirements		■	

[6] A safety matrix based on the basic education can be found at www.ecvaet.eu

Also, the ***management competencies*** cited in the following table are of great importance for the qualification profile of the master craftsperson. The interviewees in the online survey wanted above all that the European master craftspersons must be able to undertake the planning, employment and supervision as well as the managing of personnel, logistics and schedules. Important is also the event documentation as well as the communication or conflict solving competence.

Table5: Management competencies

Competence	Category		
	know	Self-perform	manage/control
Conceptualise events (Sequence planning, personnel employment, cost calculation, ...)	■	■	■
Undertake cost accounting (calculations, offers)	■		
Calculate budget/undertake cost control	■		
Undertake bookkeeping (based on basic knowledge)	■		
Follow up events	■		■
Coordinate individual special fields			■
Monitor event		■	■
Plan deployment of personnel		■	■
Plan deployment of logistics			■
Monitor schedules		■	■
Manage staff/team		■	■
Document events		■	■
Communicate and cooperate with directors, staff, artists, event organisers etc.		■	
Resolve a conflict		■	
Interpret artistic requirements in technical operations		■	
Structured working		■	
Representative appearance towards the commissioner		■	
Act entrepreneurially (take into account the profitability ....)		■	

4 Competence matrix as common basis

With the draft of the competence matrix developed in this project, a specific presentation form was chosen to map the competencies which are in relation to professional responsibilities in the event technology. On this basis, entire educational trainings, also partial and full qualifications of professions in different educational levels can be presented. This facilitates comparisons of qualifications and competencies and contributes to transparency of professions and educational trainings. Furthermore, the competence matrix acts as a translation aid for stakeholders, employers and workers which contributes to a clear presentation of the usual language of education curricula in educational training as well as the language of labour market.

4.1. Structure of matrix

The development of competencies can be described irrespective of concrete educational training offers and different national educational training, as well as according to the use of a suitable sector-related competence development model. The methodical basic model used in the present project to describe the competencies in the professional field of event technology follows the VQTS-model[7] (Vocational Qualification Transfer System). The competencies in regard of main tasks in the so-called competence areas are described in it and the progress in phases of competence development are presented in form of a table as competence matrix. This enables the mapping of competencies in relation to occupational tasks as well as a common form of description for different educational trainings in a professional field. Particularly the requirement levels on competencies can be described transparently. Individual competencies can also be derived from that and applied in the same substantial and qualitative character in other systems and professions.

At the same time, the structure of matrix considers available European transparent instruments like the European Qualification Framework (EQF)[8], to map the development of competence levels at multiple levels of qualifications. Partial qualifications, basic qualifications like vocational education and training / apprenticeship training and specialisation up to the highest vocational qualification like the master craftsperson education and training can be mapped in a scheme from the presentation form.

4.2. Basic education

In the previous projects "ECVAET – ECVET in Event Technology"(ECVAET 1) and "ECVAET 2 – ECVET in Practice in Event Technology Services" (ECVAET 2), the competence matrix with a strong practical component for the vocational education and training/apprenticeship training in event technology was tested. In ECVAET 1, the goal was to formulate learning results which can have validity for all the participating countries like Germany, Switzerland, Liechtenstein and Austria.[9] The focus in ECVAET 2 were the differences of the country-specific educational training courses, which can be covered in case

[7] Markowitsch Jörg / Luomi-Messerer Karin (Hrsg; 2006): VQTS model. A proposal for a structured description of work-related competences and their acquistion. Vienna. *www.vocationalqualification.net*

[8] cf. European Commission. The European Qualifications Framework for Lifelong Learning. Luxembourg: Office for Official Publications of the European Communities, 2008. *www.ec.europa.eu*

[9] cf. Sommerauer et. al.: Report and Recommendations from the ECVAET Project- ECVAET - ECVET in Event Technology. Vaduz 2013. www.ecvaet.eu

of a cross-border exchange programme for professionals through additional further educational training measures.[10] The entire research was developed on the basis of interviews with experts, training institutions and stakeholders of the sector. Thus, it was ensured and tested that the competence matrix includes all relevant fields and work tasks of the basic education in event technology.

The identified competencies were classified in eleven competence areas (vertical axis) and according to the level of the competence development (horizontal axis) classified in the matrix, as presented in the following illustration. This matrix was taken over in the present project on EQF level 4 and describes a common name of the vocational education and training/apprenticeship in countries Austria, Germany, Switzerland and Liechtenstein, thus comprising all those abilities which can be considered for the professional field of event technology in these countries.

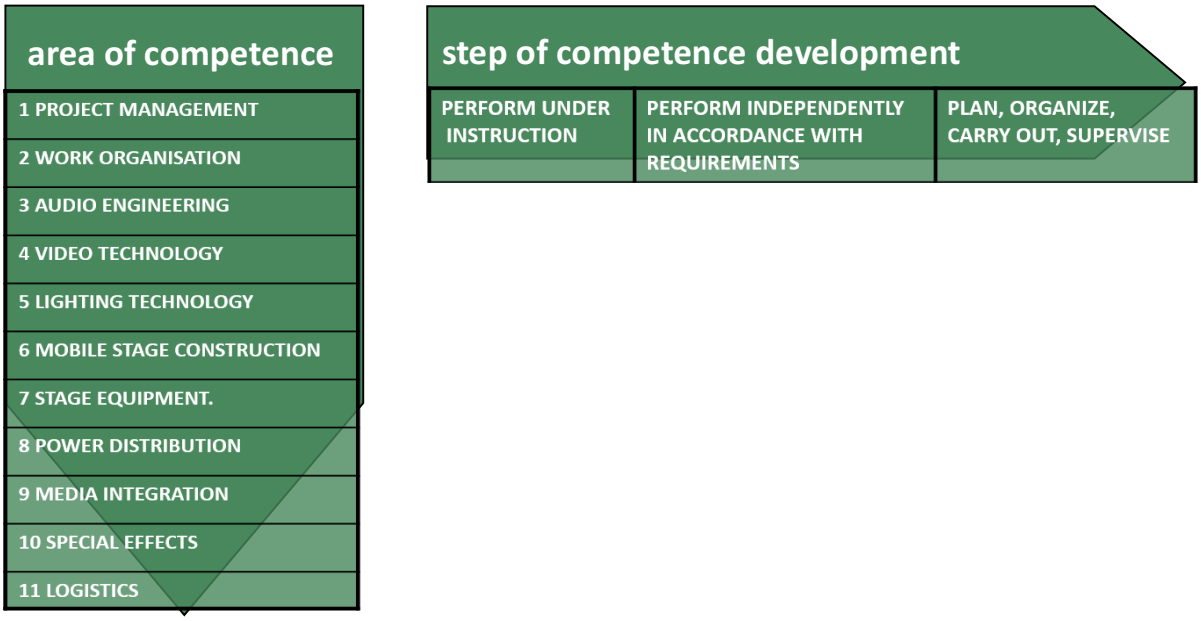

Illustration 2: Construction of the matrix in ECVAET

4.3. Specialisations

For the event technology, there is a row of specialisations (EQF level 5) in the vocational education and training, which connect to the basic education and can be found again in the eleven competence areas. To meet these requirements through the presentation of a competence matrix comprising the qualification levels, individual examples in the matrix, which should basically demonstrate the system and not comprise a complete illustration of all specialisations in the sector, were presented in the project. For a clearer illustration of the system of competence descriptions beyond qualification levels, the following table shows a section of the new competence matrix at the interface vocational education and training and specialisation.

[10] cf. Sommerauer et. al.: ECVAET 2 -ECVET in Practice in Event Technology Services: Report, Results and Recommendations. Report on the project of the same name. Vaduz 2015. www.ecvaet2.eu

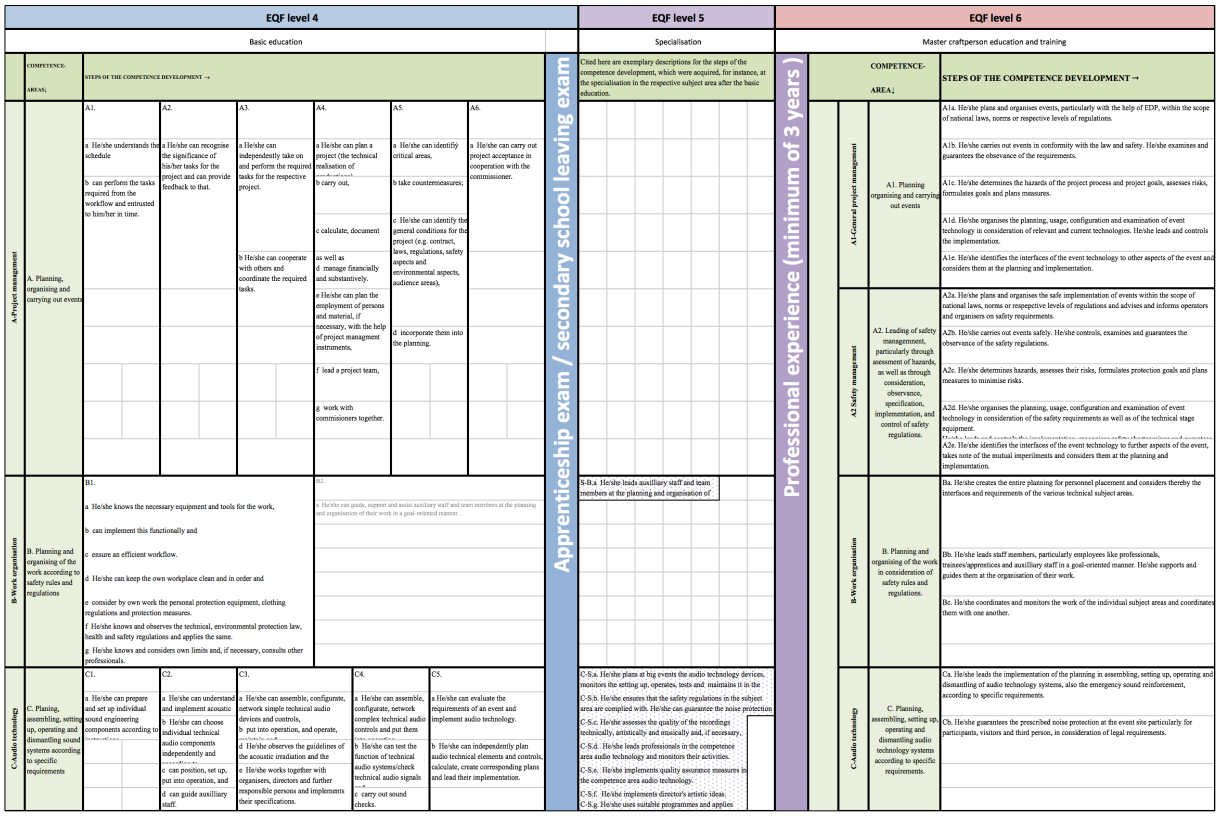

Table 3: Competence description about qualification levels

4.4. Master Craftspersons Education and Training

The area in the competence matrix which concerns the master craftsperson education and training was designed on the basis of the identified requirements from the survey phase of the project. The first step was to differentiate the requirements on technical-professional competencies and separate clearly from those of vocational education and training/apprenticeship training. Analogous to the procedure in the development of the first competence matrix out of the project ECVAET 1, the identified master's competencies were then derived in hosted workshops with experts of the consortium, revised in multiple feedback loops and finally coordinated with stakeholders of the sector. The sector's demand for a master craftsperson in event technology to possess a broad knowledge, as illustrated in the competence matrix of vocational education and training/apprenticeship and a subject-related professional experience of at least three years, was accepted as entrance requirement from the stakeholder interview.

A supplement of the competence matrix appeared to make sense for the technical-professional competencies of the master craftsperson education and training, namely to divide the field of project management into ***general project management*** and ***safety management***. Though the activities of a master craftsperson extend far beyond the general project management, the safety aspect is mostly coupled to the implementation of an event project. There are only few safety relevant tasks which can be assigned exclusively to one management competence. The safety in the event technology is in any case a central topic which was dealt with in the present project to supplement the competence matrix based on the created safety matrix.

A master craftsperson must be able to learn the necessary requirements for a specific function in the company and his professional activities, to learn therefore those competencies which are necessary for the performance of a new function. In focus here are particularly those aspects which are necessary for the performance of managing tasks. Therefore, the competencies in the eleven existing competence areas were supplemented in the new master craftsperson education and training competence matrix and five additional fields for the necessary professional management competencies were added. The following table shows the details.

Table6: Competencies in the competence matrix master of event technology

technical-professional competencies	
A1	General project management
A2	Safety management
B	Work organisation
C	Audio technology
D	Video technology
E	Lighting technology
F	Mobile stage construction
G	Stage technical equipment
H	Power distribution
I	Media integration
J	Special effects
K	Logistics

Professional managementcompetencies	
L	Management & organisation
M	Finance
N	Personnel
O	Communication
P	Documentation

Since the master craftsperson education and training represents the highest educational training in event technology of the vocational education and training in EQF-system, the matrix no longer contains steps of competence development, but rather describes the minimum competencies necessary for the professional performance in the individual special areas.

Regarding safety relevant requirements on the master competencies, the description of competencies in the technical-professional competence areas was incorporated in the competence matrix to clearly emphasise the corresponding safety aspects. At the same time, an extended safety matrix was developed, which is to be understood and used as full instrument in combination with the competence matrix.

5 Safety in the event technology

A basic, continuing-, and further education and training cannot even finally determine all relevant safety aspects. It must rather promote the ability to recognise and classify the hazards for involved persons and tangible assets, as well as to acquire information in this regard independently, to initiate corresponding measures and implement the same.

This requires professional competence on the one hand and personal competencies on the other hand. Both competence fields must be continuously and equally used and maintained, so that lifelong learning especially in this context is emphasised. Consequently, the safety relevant factors are collected in a separate safety matrix within the project framework and presented first irrespective of the educational and training plans.

Basically, the terms "function", "competence" and "(formal) qualification)" regarding safety must also be differentiated as shown in capital 2.2. The aspects and contents, as described in the safety matrix and identified during the project, refer to the typical area of activity and responsibility of a master craftsperson in event technology. In practice, the operational areas, responsibilities and requirements are very diverse, certainly depending on the project and respective. Focal point is the ability of the master craftsperson, upon the acceptance of a function, to assume the context-oriented responsibilities for the safety-related elements and to function as guarantor with legal responsibility for the safe implementation of events.

5.1. Presentation through the safety matrix

The present safety matrix for event technology demonstrates the connections between the identified necessary competencies of the European Master Craftsperson of Event Technology and the subsequent safety aspects. It has been introduced as instrument in the previous, first ECVAET projects and has been detailed, expanded and revised for this project.

5.1.1 Competence areas

Analogous to the competence matrix, the matrix is structured in the essentially typical ***competence areas*** for events and represents the safety-relevant parameters for these areas. In the first columns of the matrix and for the individual area to be considered, relevant ***procedures, objects and processes*** and related aspects are in focus. In each case, examples, annotations and influences were identified for clarification which serve as an explanation and make no claim to be complete. Individual aspects can pertain exclusively to concrete and clearly defined activities, others are required interdisciplinary as interface competencies.

5.1.2 Prevention, safety, protection of…

The second area of the matrix considers the objects of protection affected by the respective operations. Persons like e.g. visitors, stakeholders or employees, or property like e.g. buildings or material can be affected. Moreover, effects on the environment can also emanate from the related processes.

Therefore, the presentation was chosen so that not all basically existing contexts are shown individually, but only those which accompany the typical functions and responsibilities of a Master Craftsperson of Event Technology. Differentiated is thereby the competence development stage required for these tasks. The European Master Craftsperson of Event Technology must, however, possess all listed competencies.

5.1.3 Hazard types

Determined and presented here are the hazard types of respective operations, objects and processes which come into effect in the competence area. In case of errors, very diverse effects like accident (long-term) damage to health, fire outbreak or other damage to property are expected and marked with a corresponding symbol.

Since these possible effects exclusively depend on the source of hazards and not the competence of the master craftsperson, no further differentiation of competence development steps was made.

5.2. From the types of hazard to competence

Based on the survey, three different competence development steps for the master craftsperson education and training were substantially identified and described. These are based on the specified as well as qualitatively and quantitatively evaluated requirement profiles of the survey:

Table 7: Competence development steps in the safety matrix

manage/ control	He/she leads the procedural implementation in the context of the overall coordination and controls the compliance of (legal) requirements.
self-perform	He/she has deep professional knowledge of the requirements, develops independently professionally detailed alternative solutions and puts these into practice.
know	He/she knows the (legal) basics for this field and has a basic substantial knowledge of the requirements.

It must therefore be clarified, that the presented competence development steps regarding the particular operations, objects and processes refer to the abovementioned "typical" field of tasks and responsibilities of master craftspersons for event technology. The acquisition of future (formal) qualification is linked to the availability of these competencies.

As for example, at the safety organisation, basic competence to lead the personnel is required in this field and the ability to control the results. However, it cannot be concluded that the Master Craftsperson of Event Technology is indeed responsible for the management and implementation of future projects. This depends solely from his assignment (function), which e.g. is evident in his employment contract.

For taking over a function, additional competencies can be required or there is no requirement regarding individual competencies. Insofar, it is the task of the commissioner/employer to describe the tasks and responsibilities related to the function, deduce the necessary competencies as well as, if necessary, the required (formal) qualifications and select the appropriate personnel. The safety matrix can thereby be an aid.

Assuming that a vocational education and training on EQF level 4, for example, the vocational education and training as "event technician" has already been completed prior to the qualification as master craftsperson in event technology, some of these required competencies for master craftsperson were already acquired in advance. They are presented here in ***normal print***, assumed as being existent and its content not considered in the education and training plan. If there are deficits, these must be eliminated before the beginning of the education and training measures.

The competencies which must be imparted newly to a master craftsperson in addition to the vocational education and training are all highlighted in ***bold print***. These are incorporated and concretised in the education and training plan.

Other safety-relevant aspects for events, although generally necessary, are usually being realized by other involved persons and not the Master Craftsperson of Event Technology. Thus, there is no listing there correspondingly, the field is empty. Carrying out and controlling a risk assessment for the number of visitors and visitor flows can be mentioned as an example; he has just to consider the basics here. He is active in other areas like managing and controlling, however, the operation is reserved to professionals and specialists.

From the safety matrix and the presented competence development steps therein, the following required knowledge, skills as well as personal, social and/or methodical abilities were derived and transferred into the education and training plan.

Moreover, the fulfilment of functions and assumption of a guarantor position (legal obligation to handle) besides the professional competencies and personal, social and methodical abilities become a key role. These are, based on experience, extrinsically much more difficult to train and evaluate. The qualifying persons here are required to promote with adequate instruction methods and didactics also the capabilities of the participants to communicate, reflect and transfer as well as the readiness to take responsibilities.

6 Education and training plan

The education and training plan serves to precise and concretise the competencies from the matrix for the implementation in the education and training. The required learning goals and learning results are formulated for every competence. These are again specified through learning contents. Also, the learning goals and learning results are formulated in a competence-oriented way, by writing "He/she…. does ". Thereby, the concrete activity should be in focus. With the verb, the required step is being stated and replaces therewith a Bloom's taxonomy. The formulation of the learning contents only uses the verb in infinitive in the sense of "to create something".

Thus, the education and training plan is a complete draft for a master craftsperson education and training and considers those requirements which go beyond the national context and consider international aspects, thus, formulating the predicate "European" for the European master craftsperson education and training.

6.1. Learning goals and competencies

The goal of the European master craftsperson education and training lies on the acquisition of EU-wide valid subject-related practical masterful competencies in event technology. The graduates of a European master craftsperson education and training are specially qualified to practise the function of a technical manager and undertake tasks from technical planning up to carrying out of events. The core area of the necessary competence and aspects of the education and training are described in a competence matrix and safety matrix.

The education and training primarily follow the goal to acquire the required professional knowledge for the master craftsperson profession and future activity, establish practical relevance through project work and ensure a good understanding about the organisation, preparation and carrying out of events. Due to their qualifications, the graduates should be qualified as managers in the relevant field and prepared to undertake responsibilities, as well as be able to act independently.

European master craftspersons in event technology has technical, professional competencies like

- technical planning with details of event schemes,
- technical management of events
- ecological and economical selection of material and preparation of production,
- monitoring and carrying out of assembling and dismantling,
- coordination of the technical crafts at the production in compliance of safety regulations,
- knowledge of the relevant legal specifications.

Moreover, they have cross-curricular competencies. Graduates should be qualified particularly in the area of personal competencies,

- to carry out tasks precisely and systematically according to technical specifications, and in conformity with norms and laws,
- to finish works order independently as well as in team with other professionals,
- to further educate and train oneself independently for the relevant special field as well as
- to communicate with event organisers and artists,

- to prepare relevant documentations,
- to understand descriptions and literature,
- to become acquainted with the work quickly and to impart available knowledge.

The European master craftsperson in event technology possesses, moreover, the qualification to structure operations with professional competence, social competence and competence to act, to obtain information, to reprocess and present these information, as well as to accurately interpret results from the event and to implement them suitably.

6.2. Possibilities of modularisation

The education and training plan is developed in the spirit of mobility. The educational training modules derived from it are conceptualised as implementation recommendation for educational training institutions and the central planning components of educational training measure. They specify in detail which knowledge, skills and competencies should be imparted until the end of the educational training. Educational training institutions should be guided through this module, but should not be restricted regarding the freedom of design for the module organisation and its implementation.

The educational training modules were developed analogous to the competence areas presented in the education and training plan, which means the competencies, learning goals and learning results as well as learning contents originated from the education and training plan and remain unchanged. The presentation raster was taken over from the further educational training modules for the transnational specialists' exchange from the ECVAET 2 project adapted for the needs of the European master craftsperson education and training. The following graphic shows the functional raster. The contents of the white areas are taken over from the education and training plan, the contents of the coloured areas shall be supplemented by the educational training provider.

Education and training module

Module identification	1 Module's title/topic				
	2 Description				
	3 Provider				
	4 Target group				
	5 Competencies	6 Learning goals & learning results He/She ...		7 Learning contents	
	8 Country-specific supplements				
	9 Competence certificate/ success monitoring				
Organisation of teaching	10 Admission requirement				
	11 Activity of teaching/learning				
	12 Place of teaching/learning	School	Workshops	Practice	Self-learning
	13 Learning time/workload	Classroom teaching		Practical training	Self-study
	14 Formal qualifications				
Provider	15 Module organisation				
	16 Responsibility/ Module development				
	17 Remarks				

Table 4: Educational training module –grid

For the implementation of the education and training plan for the European master craftsperson education and training in event technology, a total of eleven educational training modules are recommended and developed in German language. The following illustration identifies these with coloured background. The illustration illustrates the derivation or summary of the competence area to the individual modules.

	AREA OF COMPETENCE	Learning objective	Learning content
A1	PROJECT MANAGEMENT		
A2	SAFETY & SECURITY MANAGEMENT		
B	WORK ORGANISATION		
C	AUDIO ENGINEERING		
D	VIDEO TECHNOLOGY		
E	LIGHTING TECHNOLOGY		
F	MOBILE STAGE CONSTRUCTION		
G	STAGE EQUIPMENT		
H	POWER DISTRIBUTION		
I	MEDIA INTEGRATION		
J	SPECIAL EFFECTS		
K	LOGISTICS		
L	LEADERSHIP AND ORGANISATION		
M	FINANCE		
N	HUMAN RESSOURCE MANAGEMENT		
O	COMMUNICATION		
P	DOCUMENTATION		

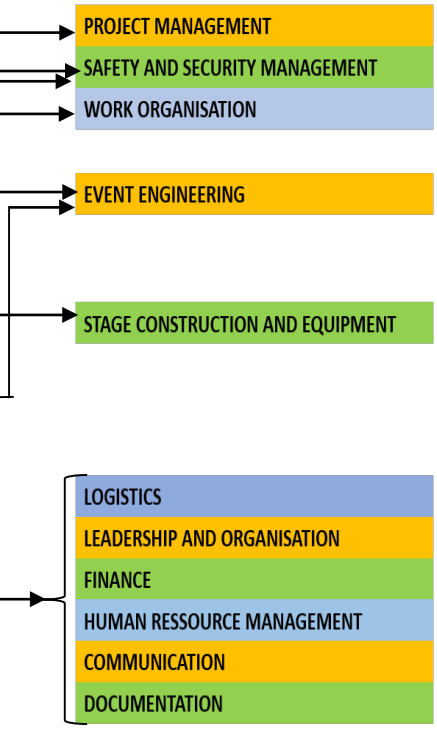

Table 5: Transition from competence area to educational training module

6.3. European aspects

During the preparation of all basis and interim results in the project, especially the education and training plan, attention was paid to reflect also certain country-specific aspects in international context, and to prepare them in such a way. Thereby, the goal was pursued that the education and training plan can be easily implemented in all countries, containing all required competencies in the professional-technical area as well as management area for the European master craftsperson.

Master craftsperson education and training, however, is not possible without country-specific elements. Always in focus are the national laws, regulations and norms. In productions, the materials and equipment which point out further specific characteristics of the country come into play. For these country-specific complements, a corresponding area in the module is provided. Responsible bodies for education and training or providers of the course can include these specific learning contents which complete the educational training in a country.

For the future mobility of professionals like the European master craftsperson in event technology, it can be helpful to list learning contents, which only concerns a single country, in this field "country-specific supplements" exclusively. This offers the advantage that employees coming from other countries can easily recognise where the specialist has to supplement his knowledge in order to work legally and equivalently in the destination country. It is also vice versa a valuable assistance for the employer when he can see the possible gaps that can be expected from a foreign employee. If the education and training plan will be implemented into the national educational training regulations of a country, it is recommended to maintain this clear separation between general and country-specific contents.

6.3.1 English as a common language

Through the cross-border activity of European master craftspersons, a common language represents an important aspect. Practice shows that the English language is applied as a common language basis. Moreover, professionals must be able to use English in routine situation as a common instrument of communication and information in simple professional and everyday life. Also, the online survey among stakeholders clarifies the importance of foreign language skills, 93% of the interviewees, for instance, stated that knowledge of the English language is very important for a European master craftsperson education and training.

In the sense of the Common European Reference Framework for Languages (GER), it is aimed here to strive for level B2. This is defined by GER: *"Can understand the main content of complex texts on concrete and abstract topics; can also understand specialised discussions in his own field of competence. Can communicate spontaneously and fluently so that, normal conversation with native speakers is possible without either side straining. Can express himself clearly and in detail on a wide variety of topics, express a point of view on a current issue, and state the advantages and disadvantages of various options"*[11].

6.3.2 European Certificate in event technology

Many productions in the event technology are transnationally conceptualised. Since only national qualifications (educational training certificates and business licenses according to national laws and regulations) underlie the education and training in event technology so far, it is aimed to develop a European CERTIFICATE in addition to the national qualifications. In future, this can transparently document and describe the competencies identified during the examination from the EU-master craftsperson education and training.

One possibility is the Europass (as also described in the ECVAET 2 project for the support of transnational exchange of professionals in event technology) with the Europass mobility certificate (a service of the European commission) as an existing Europe-wide uniform document, in which graduation/qualifications, vocational education and training pathways will be described in detail. The

[11]Source: A Common European Framework of Reference for Languages CEFR (*Gemeinsamer Europäischer Referenzrahmen für Sprachen GER*) on https://europass.cedefop.europa.eu/resources/european-language-levels-cefr

Europass can (in addition to the graduation document) describe the abilities, competencies and qualification, and should explain the connection between education and economy to employers/, educational institutions and organisations in the EU. With the mobility certificate, all foreign experience can be documented for learning or educational/training purposes.

The vocational education and training systems in the European countries are differently established and therefore often very difficult to compare (each other). The international standard classification of education (ISCED) is an instrument of statistics and serves the international comparison of educational qualifications. ISCED 2011 differentiates between nine levels of education and training, from elementary to advanced research qualification. A European-ordinance or at least a European-guideline for common responsible implementation of the education and training contents for the master craftsperson qualification in event technology (ET), developed in ECVAET 3, would be desirable on the background of the present project results. A step in this direction will be (in the meantime politically continuously accepted and fully justified regarding German industry master) the classification on NQR/EQR level 6.

6.4. Weighting through points

While creating the education and training plans, a credit points system for the European master craftsperson in event technology (ET) was developed tentatively and exemplarily with the purpose,

- to reach measurability of necessary job performance on the achievement of competence, as well as
- to allow the comparability of educational training in international context,
- based on the classification of the job performance per competence area and
- through determination of corresponding credit points per competence.

For this purpose, a comparison between the European Credit Transfer and Accumulation System (ECTS) credits from higher education and ECVET points recommended by the European commission was created. As there is no specified ECVET definition for the measurement of performance of e.g. number of hours per point, it was defined in the consortium that an ECVET point includes a workload of 25 hours which again corresponds to the average required scope of performance on colleges for one ECTS credit.

The classification of determined workloads for every competence from the education and training plan was made based on three classes of efforts. This classification gives assistance at the same time in the characterisation of further education and training events (named as course/seminar/lecture in university/college level). At the assessment of effort, in-house learning progress checks and projects were included in the calculation. Regardless of the total credit points as represented in the following tables in this draft, a percentage distribution and hence weighting of focal points within the European master craftsperson education and training can be shown.

For the optimal achievement of all the required competencies of EQF 6, the consortium recommends the specified scope in the ECTS-credit list to be implemented in an educational training measure. The time needed for examinations for the achievement of a formal qualification is not included in the ECTS-credit list.

Table 8: Tentative classification of credit points

		Workload (h)	Teaching in classroom/per online (h)	Work on seminar/ project (h)	Self-study/ learning time (h)	ECVET points (1)	% of total hours
Technical-professional competencies		**1510**	**495**	**745**	**270**	**60.4**	**67.1%**
A1	General project management	125	50	55	20	5	5.6%
A2	Safety management	425	125	230	70	17	18.9%
B	Work organisation	130	30	85	15	5.2	5.8%
C	Audio technology	115	50	40	25	4.6	5.1%
D	Video technology	20	5	10	5	0.8	0.9%
E	Lighting technology	80	20	45	15	3.2	3.6%
F	Mobile stage construction	190	55	100	35	7.6	8.4%
G	Stage technical equipment	160	55	65	40	6.4	7.1%
H	Power distribution	30	5	20	5	1.2	1.3%
I	Media integration	30	5	20	5	1.2	1.3%
J	Special effects	80	40	30	10	3.2	3.6%
K	Logistics	125	55	45	25	5	5.6%
Industrial management competencies		**740**	**290**	**290**	**160**	**29.6**	32.9%
L	Management & organisation	100	40	25	35	4	4.4%
M	Finance	155	45	70	40	6.2	6.9%
N	Personnel	85	45	25	15	3.4	3.8%
O	Communication	175	75	55	45	7	7.8%
P	Documentation	225	85	115	25	9	10.0%
	Total	**2250**	**785**	**1035**	**430**		

6.5. Crediting of educational and training performance

The master craftsperson education and training does not offer an introduction into the event technology but is based on a solid basic education and training in event technology (ET) and requires also years of relevant occupational experience in the practice of the profession. As already mentioned, the master craftsperson education and training does not also include deepening in individual areas in the sense of a specialisation in certain technologies in the event technology (ET). The focus of the master craftsperson education and training is clearly the competence, in broad spectrum of the event technology, to plan the workflows comprehensively, examine the tasks competently as well as recognise and remedy the critical situations in a timely manner. To achieve this goal within the scope of the master craftsperson education and training, the admission prerequisites must be fulfilled and that means the necessary competencies of EQF 4 are available.

In the sense of mobility and European idea, these qualifications may also originate from other countries. Added to this is the special situation in the event technology that many people come from other occupations and have familiarised themselves in the event technology (ET). To be mentioned

here in particular are the skilled trades like carpenter, mechanist, and electrical fitter. All these should not be denied access to a master craftsperson education and training. As a result, there are three variations for the admission in the master craftsperson education and training:

- Qualification in the own country in the corresponding basic education
- Formal recognition of foreign degrees or qualifications
- Recognition of other educational performances

Based on European certificates as recommended in 6.3.2, national procedures on recognition and validation can help to obtain a national qualification. There is no uniform pan-European regulation for the recognition of qualifications acquired abroad. There are much more different procedures which are country-specifically designed and for which different institutions are responsible.

In the Federal Republic of Germany this is, for example, the IHK FOSA (Foreign Skills Approval), the nationwide competence centre of German Chamber of Industry and Commerce, for the determination of the equivalence of foreign professional qualifications. In countries of the partners in consortium participating in the project, the following possibilities exist:

In Austria the curriculum and the examination regulations of the Foreman school for event technology are created by the Federal Ministry of Education and issued through ordinance. ***Prerequisites for the completion*** of the Foreman school event and event technology in Austria are:

- a positive completed relevant final apprenticeship examination,
- or a positive completed relevant technical college,
- or a person with type related apprenticeship certificate (type related final apprenticeship examination means: electronic-module apprenticeship, metal technology module apprenticeship) with at least 4-year relevant practice,
- or a graduate of secondary school (HTL-Matura).

Until the completion of the apprenticeship examination in event technology (ET), participation as extraordinary student in the Foreman school is possible.

6.5.1 Recognition in Austria

For the recognition of acquired qualifications abroad, there is actually no uniform regulation in Austria. There are much more various procedures established by those institutions which are responsible for the corresponding educational training in the Austrian educational system. Persons who want to have recognition of their ***master craftsperson qualification*** acquired abroad, several possibilities are available for selection.

Regulated professions

Whoever wants to practise a regulated profession in Austria has to apply for recognition. A profession is regulated if the acquisition of the specific diplomas, titles, certificates or other qualifications is linked with the access to this profession (e.g. photographer, carpenter, master builder, architect, nurse etc.). If such proof is not required, these professions are considered non-regulated (e.g. journalist, event manager etc.). Further detailed information can be found at-www.berufsanerkennung.at.

Vocational education and training agreements exist with Germany, Hungary and South Tyrol. These regulate particularly the equal assessment of apprenticeship certificates. The agreement with Germany contains also equal assessment of industry master education and master craftsperson qualification. Detailed information is available at www.bmwfw.gv.at.

Recognition without certificate or proof

For persons entitled to political asylum or subsidiary protection who without fault cannot show certificates or diplomas due to their escape, there is a possibility to have their knowledge, skills and competence acquired abroad recognised. Whether this applies for the individual, the advisory office can give information on this matter (to be found at www.berufsanerkennung.at).

On the way to recognition of an educational training, equivalent to an Austrian master craftsperson qualification, the following recognition procedures can still be considered:

School completion certificates and secondary school leaving certificates (Reifeprüfungszeugnisse)

Foreign school certificates or secondary school leaving certificates can be assessed equally as long as they substantially conform to the Austrian curricula. Agreements already exist with some countries. Responsible for it is the Federal Ministry of Education www.bmb.gv.at or the Recognition Information Application System (AAIS) https://www.asbb.at/.

Field of higher education

The recognition and equal assessment of a foreign academic degree takes place in Austria by means of nostrification. If this is the case, a higher educational training can be pursued in Austria or the access to labour market can be created (see also section "regulated professions"). Information and contact point is the Federal Ministry for Science, Research and Economics or the respective higher educational institutions (both www.bmwfw.gv.at).

6.5.2 Recognition in Germany

The IHK FOSA (Foreign Skills Approval) is the nationwide competence centre of the German Chamber of Industry and Commerce for the determination of the equivalence of foreign professional qualifications. It accepts applications for recognition and compares to what extent foreign professional qualification can be classified as equivalent to a corresponding German professional qualification.

Most important basis for the recognition of foreign professional qualifications in Germany is the "Law to improve the assessment and recognition of professional and vocational education and training qualifications acquired abroad" – in short: Recognition Act which is effective since April 1, 2012. It gives for the first time all persons with state-recognised foreign professional qualification irrespective of citizenship or residential status a general legal right to individual equivalence examination. The Recognition Act includes a new federal law, the so-called Professional Qualification Assessment Act (BQFG), as well as amendments in the VET Act, in the Trade and Crafts Code and in further professional specific ordinances.

Bilateral agreements which equate specific Austrian professional qualifications with corresponding German qualifications exist in Austria.

Aside from this formal equivalence of specific professional qualifications, there is now the so-called "Joint Declaration", which determines the basic mutual comparability of professional qualifications. Persons who possess an Austrian professional qualification which is not included in the abovementioned bilateral agreements, and who value a formal recognition, can, of course, apply for equal assessment in accordance with BQFG. Detailed information can be found at http://www.ihk-fosa.de/die-ihk-fosa/.

6.5.3 Recognition in Switzerland and Liechtenstein

Basic prerequisite for the admission in a master craftsperson education and training, i.e. for a higher professional examination or a professional college is the completion or the certificate of competence in the respective profession. In event technology (ET) this would be the event professional. Then there are the several years of professional experience added to that. In certain professional fields, a prior specialisation through a professional examination is required beforehand. For a master craftsperson in event technology (ET), that would still have to be regulated in Switzerland.

In Switzerland, SERI – the State Secretariat for Education, Research and Innovation which is the national contact point for the recognition of professional qualifications – is responsible for the recognition of foreign professional qualifications. It is the first central point for general enquiries regarding the recognition of foreign diplomas and identifications. Information on the functions of the contact point as well as the coordinates can be found on the website:
https://www.sbfi.admin.ch/sbfi/de/home/bildung/diploma.html

In Switzerland, the recognition of non-formal education performance is already provided in the vocational education and training act (BBG). This is why many education and training courses of higher vocational education and training know an admission "sur dossier" with an extended professional practice. The law requires a corresponding procedure to be defined for every profession in the context of vocational education and training. The description "recognition of educational performances" refers to a procedure on how persons with long-term experience can acquire a competence certificate without undergoing a formal education and training and formal qualification procedure. Prerequisites are at least 5 years of practical experience in the profession and the minimum age of 25 years. The procedure is particularly suitable for the basic education in which the future undergoing of an apprenticeship makes little sense.

The basics of the procedure are the qualification profiles of each profession, which define the competences to be achieved. The candidate describes and documents here his professional activity and the acquired competencies in a dossier. This dossier will be discussed with experts and examined by them whether the required competences are sufficiently proven. The experts have a catalogue of criteria for the profession. A profile will be created for every profession. If it shows at this examination that certain competences are lacking or insufficiently proven, a corresponding catch-up education will be required.

7 Recommendations for implementations

The central recommendations for implementations from the present project include the

- recommendation for implementation for the educational institutions and the
- recommendation for the countries to create a formal qualification.

Similar to the college education, developed fundamentals in this project especially the education and training plan can be considered as core-curriculum and can be used as equivalent for the Bologna Process in the vocational education and training.

7.1. Function of providers and educational institutions

It is the function of educational institutions in the individual countries to implement the present education and training plan into an appropriate national version. This particularly includes those country-specific complements in the education and training modules which are required to practise the profession competently and with the necessary responsibility in the respective country. Elements from practice can be included here and the national or regional practices in the event technology (ET) can be given sufficient attention. It is also recommended to maintain the proposed division in the modules, whereby the course design should remain individually designed to enable the application of various methods in teaching and learning.

To promote imparting of knowledge and as interface competence, like for example through comprehensive module-projects. The internal course success monitoring and the competence certificate take place under consideration of the recommendations of the EU-master craftsperson qualification and the national legal provisions.

Regarding the implementation of the education and training modules by national education and training institutions, the national requirements and challenges have to be especially considered, like e.g. the applicable laws, ordinances, regulations, rules and norms in the field of safety management. In addition, particularly the following aspects should be taken into consideration:

a. Knowledge about national training regulations and commercial law
b. Provide the latest learning materials e.g. for safety management
    - Right terminology terms for theater, entertainment and event technology
    - Characteristics and safety technical specifications for audience seats and platforms
    - Safety technical requirements on machines, equipment, spotlights, illuminants, and scenic performances
    - Personal protective equipment against falls
    - Safety colours and safety signals
    - Fire behaviour of textiles, plastics, recyclable materials
    - Measures for avoiding hazards to ear and eyes
    - Respective EU-guidelines, CE marking, norms, ordinances, laws

Additional attention applies to the qualification procedure with which the education and training will be completed. This qualification procedure will be set according to the normal standards of the country. As recommendation, this procedure should be carried out in a competence-oriented manner.

7.2. Admission requirements

The admission requirements also have to be concretised for the concerned country according to chapter 6.5 and should establish the duration of the required professional practice. The hurdles should not be set too high to promote mobility for participants from other countries and from other professions, too. If necessary, it might be advisable, also for the purpose to strive admission prerequisites on a certain level, to offer an additional educational training offer, a so-called pre-course.

7.3. Didactic considerations

Modern education and training have competencies as a goal. Though competencies require the acquisition of knowledge and skills, too, the competencies arise at first through their implementation in concrete work situation. This process must also be considered in the educational training and concrete situations have to be provided for the learning processes. Hereby, a meaningful crossed interdisciplinary teaching can and should find application.

Digitalisation of education and training is Europe-wide in focus in the development of education and training measures. With the help of possibilities and based on digitally prepared teaching aids, teaching nowadays can also happen in virtual rooms. Here it needs to be decided how the different learning places can be appropriately integrated in everyday teaching and learning, also in the carrying out of learning goal controls.

7.3.1 Examination of competencies (learning results)

Progress monitoring and examination of competencies are central elements of education and training especially also the final (formal) qualification. These instruments can also be used to examine the required competencies for the admission in the master craftsperson education and training if there is no available recognised qualification.

The term competence describes in ECVAET3 the ability to use available knowledge and skills as well as personal, social and/or methodical abilities, particularly for problem solving as well as the readiness to do this and is therefore a manifestation of professional acting competence. Therefore, specialised knowledge, abilities and skills as well as personal abilities ("soft skills") are to be considered at the competence assessment.

A pure knowledge inquiry, e.g. by means of carrying out selection tasks is not expedient, a main objective here is to determine the real professional acting competence based on the necessary competencies with the aid of an assessment and validation procedure. In addition, different instruments are available which can be combined and shown hereafter. Furthermore, concrete examination periods and comprehensible assessment criteria should be formulated for different examination tools.

7.3.2 Catalogue on examination tools

In the course of the preparation of the plan and modules for education and training, the question arose concerning the application of the coming progress controls and examination tools. Based on available experience from the established practice in event technology (ET) and through the examination experts for master craftsperson in the event technology employed in consortium, the subsequent catalogue on examination tools was prepared, as well as a table for possible and recommended combinations. The list below should not be considered as final but should describe the room for manoeuvre.

Tasks to be processed in writing should be practice-oriented or typical of the occupation and bring forth event related documents, like e.g. material lists, circuit diagrams, checklists, working plans, personnel plans, organisation charts, construction schedule, time schedule, project documentation or protocols as processing results. Thereby, professional knowledge, understanding of the background and contexts, and methodical procedure as well as solutions and alternatives are being evaluated. Also, formal aspects (like structuring, construction, writing style) can be considered.

Work task consists in the implementation of a complex task typical for the occupation and is complemented by other job-related examination tools. Thereby, the method of work and procedure as well as the work result are being evaluated.

The ***(operational) Project*** consists of the implementation of an occupationally typical project. The implementation is documented with practice-oriented documents, explained and reflected during a project-related expert discussion and, if necessary, described by a presentation. Thereby, the method of work and procedure as well as the work result are being evaluated.

The ***documentation*** with practice-related documents takes place in connection with a previously conducted operational order or a conducted work example. For this purpose, the participant prepares practice-related documents, like e.g. reports, material lists, circuit diagrams, checklists, work and personnel plans, organization charts, construction schedule, time schedule, project documentation or protocols and/or compiles available documents with which the planning, implementation and control are being described and proven.

The ***presentation*** includes the description of a previously conducted operational order or a conducted work task. Thereby, the participant represents issues and contexts typical for the occupation and discusses questions related thereon. Thereby, the methodical procedure, communicative abilities as well as the form of presentation are being evaluated.

The ***case-related expert conversation*** is being held based on a participant's conducted or prescribed practice-related work task. The participant can prepare for the conversation by means of documents and can use these also in the meantime. Thereby, the understanding for issues and contexts, the methodical procedure, solutions and alternative as well as the communicative abilities are being evaluated.

The ***project-related expert conversation*** includes a practical conducted (operational) project and supports the evaluation. Thereby, the procedure, problems and solutions as well as the accompanying

facts and professional questions are being reflected and evaluated together with the understanding for backgrounds and contexts.

The ***situational expert conversation*** is being held during or after the implementation of a work task and supports the evaluation. Thereby, professional questions and facts, procedures as well as problems and solutions are being reflected and evaluated together with the understanding for backgrounds and contexts.

The ***simulated conversation*** is an oral role-play at which the participant interacts in a future occupational function with a conversation partner. The participant can prepare for the conversation by means of documents and can use these also in the meantime. Thereby, understanding for backgrounds and contexts, methodical procedures, solutions and alternatives, communicative abilities as well as customer orientation are being evaluated.

The following table shows a compilation of examination tools and their possible combinations which are recommended or mandatory in some cases.

Table 9: Examination tools and recommended/possible combinations

Examination tools	Recommended combination	Possible combination
Tasks to be processed in writing		• Documentation with practice-related documents • Situational expert conversation • Work task • (Operational) project
Work task		• Tasks to be processed in writing • Documentation with practice-related documents • Presentation • Order-related expert conversation • Situational expert conversation
(Operational) project	• Documentation with practice-related documents **and** order-related expert conversation	• Presentation
Documentation with practice-related documents	• Work task • (Operational) project	
Presentation	• Work task • (Operational) project	
Case-related expert conversation		
Project-related expert conversation	• Work task • (Operational) project	
Situational expert conversation	• Work task	
Simulated conversation		

7.4. Formal considerations

It is in no case the goal of the project to view the European master craftsperson education and training in event technology (ET) developed as recommendation for the implementation as form of ~~a~~ European superordinate guideline for future master craftsperson education and training in the event technology (ET). The processed fundamentals should be considered much more from a national perspective as reference framework towards which it is worth to orientate.

The extent, to which the master craftsperson education and training in event technology (ET) will be implemented and accepted in the market, is shown in practice. If the present master craftsperson education and training should find recognition as "European", it needs at first the clarification of the question on recognition and assessment in the sense of equation of the educational training with a national equivalent. As clarified in chapter 6.5, there are already possibilities to recognise training course graduates of the present European master craftsperson education and training in event technology through available national structures in Austria, Germany, Switzerland and Liechtenstein.

Further preliminary surveys have shown that conducting a master craftsperson education and training based on international initiative and conducted by various education and training providers, can fulfil the national requirements on the national master craftsperson education and training. The respective participants here would have to fulfil the formal requirements of the national examinations in the participating countries like e.g. Germany and Austria to be able to obtain the desired national qualification. In every case, it is to be aspired in the medium term, to receive state recognition for the education and training for European master craftsperson in event technology.

8 Relevance and outlooks

The relevance of the project work and their effects on the event technology (ET) sector can be inferred from the results or the dissemination activity in the project. The stakeholders of the sector were already involved in the survey phase at the early stage of the project duration, then constantly informed of the interim results and their feedback considered in the further development. Through the presentation of the project results in the scope of the largest international trade fair of event technology sector, the ProLight& Sound in Frankfurt as well as on the final presentation in Vaduz, a broad approval was shown from various stakeholders of the sector including technical operations, fixed event centres, but also representatives in the field of continuing vocational education and training and higher education.

Impressive for the consortium were the many positive feedbacks of specialists who wanted to register in advance for the European master craftsperson education and training. Among them was a variety of specialists who already have a national master craftsperson education and training. Alone from this, it can already be deduced, and this was also determined in many personal conversations, that a European master craftsperson education and training in event technology (ET) is being desired by the sector and is even being urgently requested.

8.1. Feedbacks and effects

On the presentation of results in Vaduz, the present stakeholders were requested within the scope of a discussion panel to answer the question on how to realise the successful implementation of the European master craftsperson education and training in ET and what effects on the education and labour market can be expected.

The lively discussion clarified the different viewpoints which were shaped predominantly national by the existing national basic conditions. So, for instance, in Germany the ordinance for master craftsperson examination is just in revision and a present person from this work group appeared to be reserved with the appraisals of the extent at which a European master craftsperson education and training would be recognised at all in Germany. Since in Germany, the examination and not the educational training is being required, this urges much more the question in focus on how a possible examination in connection or even within the scope of the European master craftsperson education and training can be implemented.

In Austria, the master craftsperson profession is regulated through ordinance, thus, teaching plans and clear specifications exist as to which requirements have to be fulfilled for the education and training. Education and training providers must also qualify here as recognised institution to be able to offer and conduct master craftsperson education and training. This encloses then also the conducting of the examination for master craftsperson. Since event technology belongs to non-regulated trades, there is also no master craftsperson but a foreman training. The respective persons who were present at the result presentation appraised the implementation of European master craftsperson education and training in Austria in an implementation period of around 5 years as realistic.

In Switzerland, the European master craftsperson education and training must be classified in form of a higher professional examination/Advanced Federal Diploma of Professional Education and Training. In addition, similar in Germany, regulated examination would be developed, which would be

coordinately prescribed together with representatives of the sector, associations and existing education and training institutions of event technology by the Ministry of education, research and innovation (SBFI). The implementation period of around 5 years is also mentioned here as realistic.

A central statement from the discussion at the result presentation was made with regard to the involvement of all stakeholders of event technology in a possible implementation process; the success directly depends on how successful the initiators group in bringing the relevant associations, public offices, social partners and education and training providers together at a table to create a consensus.

8.2. Possibilities of European implementation

An alternative way to initiate this long-term process and to start a possible implementation of the European master craftsperson education and training contemporarily and at least between the countries Germany and Austria has been proven. This exemplary implementation is based on the presented possibilities for recognition and assessment of educational performances in the capital 6.5 et seq.

As a possibility for the implementation, it would be conceivable to perform the European master craftsperson education and training, in an educational training alliance/association between education providers from Germany, Austria and Switzerland/Liechtenstein with a first cohort, including national supplements which fulfil the necessary national qualification requirements. This action could be promoted in Austria, for instance, by the Federal Ministry of Education and based on an Erasmus + project with the help of a "national co-financing" from the OEAD (Austrian Agency for international mobility and cooperation in education, science, and research) to support further internationalisation of the Austrian educational system and the sustainable anchoring of project results in the education system.

The graduates of this first cohort could also be qualified in the Federal Republic of Germany. Specific basic requirements or admission criteria must be met to be allowed to take the master craftsperson examination and be called as "certified Master Craftsperson of Event Technology". The attainment of this formal qualification is exclusively bound to this examination; attendance of educational measures or preparatory measures is not mandatory.

The admission to the so-called advanced training final examination is usually linked to the certificate of the basic education with subsequent work experience. A lateral entry is possible in special cases. This is concretely formulated[12], for Master Craftsperson of Event Technology in Germany that this

> *"…be proven with a successfully passed final examination in a recognised industrial and technical training and then a work experience of at least two years…" or a "…work experience of five years…"*

Furthermore, it should be proven through certificates that the examinee

[12]Source: Bundesgesetzblatt 2009. Part I. No 56. Published in Bonn on August 26, 2009. Page 2920
Regulation fortheexaminationofqualificationas a Certified Master in Event Technology (*Verordnung über die Prüfung zum anerkannten Fortbildungsabschluss Geprüfter Meister für Veranstaltungstechnik/Geprüfte Meisterin für Veranstaltungstechnik*)

> *"…has practised activities where skills, knowledge and abilities (ability to act professionally) are necessary for the performance and which are equivalent to the professional actionability of a specialist for event technology."*

Finally,

> *"…allowed to take the examination is one who can prove through submission of certificates or other means to have acquired skills, knowledge and abilities (professional ability to act) which justify the permission to take the examination."*

Furthermore, the one who wants to graduate must show a successfully passed so-called AEVO-examination (trainer aptitude examination).

8.3. Closing remarks

The comprehensive results from the ECVAET 3 project are designed to take account of the actual requirements in professional education and training (PET) in event technology (ET). The desire for a European dimension of vocational education and training (VET), however, is not only available in event technology (ET) since many other sectors with similar requirements can initiate and promote analogous developments based on the project results from ECVAET 3. The products serve here as a template and the implemented work processes in the project serve as exemplary approach.

The two-year project work has shown, not only in consortium but also on the interface to all stakeholders of this project, that the reflection on commonalities is a key for a sustainable sector and sustainable Europe. Therefore, it is even more important for these professional associations of the sectors in Europe to improve their network and coordination so as to be able to meet the future requirements with common actions and developments.

Annex A: The project partners

The ECVAET 3 project was supported by the following partners:

Liechtenstein

Institute of Entrepreneurship of the University of Liechtenstein

Thomas Moll	Project manager and coordinator of the Project consortium

Global Partners Online Communication Services Trust reg.

Peter Sommerauer	Manager and project management

Germany

VPLT – Association for Media and Entertainment Technology (*Der Verband für Medien- und Veranstaltungstechnik e.V.*)

Sacha Ritter	Area manager finance & business operations, project management
Ralf Stroetmann	Area manager education and law, project staff member
Maike Schachlitz	Project staff member

Austria

Ibw – Research & Development inVET

Silvia Seyer-Weiss	Project manager
RoswithaHinterstein	Project staff member
Alexandra Pötsch	Project staff member
Simon Skerlan	Project staff member

Austrian Theatre Technical Society (*Akademie der ÖsterreichischenTheatertechnischen Gesellschaft m.b.H*)

Monika Weese	Manager Academy of OETHG, project staff member
Manfred Gabler	Study planner Academy of OETHG, Project staff member

Switzerland

BCH Vocational and professional education and training in Switzerland (Berufsbildung Schweiz), Association of teachers in vocational schools, supported by movetia – the Swiss agency for exchange and mobility;

Christoph Thomann	Vice president of BCH Former vice-rector of the Technical Vocational School of Zurich Co-founder of the profession Event Specialist in Switzerland

Annex B: Glossary

Term	Definition
Analysis chart	The created table of analysis in ECVAET 2 includes those learning results which in comparison between partner countries are not trained in the event technology basic education (apprenticeship training). Lacking knowledge/skills/competencies in other respective country as well as norms and laws were presented here in detail in an excel chart. Analysis charts for Germany, Switzerland/Liechtenstein and Austria are existent.
ECVAET	ECVAET is a word coining from the terms ECVET (**E**uropean **C**redit System for **V**ocational **E**ducation and **T**raining) and **VAT** (***V**er**A**nstaltungs**T**echnik*) Event Technology (ET).
ECVET	With ECVET is meant the **E**uropean **C**redit system for **V**ocational **E**ducation and **T**raining, on the basis of which can learning results be documented. This basis can be used for assessment and transfer of occupational and professional educational achievements and can support thereby a greater transparency, mobility and permeability between the education and training fields and beyond borders.
ECVET-credit points	Numerous presentations of the total weight of learning results of a qualification and of the proportionate weight of units in relation to the qualification.
EQF or EQR	EQF (European Qualification Framework) or EQR (*Europäischer Qualifikationsrahmen*) should serve as "translation assistant" between national qualification systems. It includes all education and training qualification fields and orientates exclusively on the learning results irrespective of formal completion of education and training. It is the goal of the EQF to make the national qualifications in Europe comparable and understandable, and to facilitate in this way the mobility of learners and specialised staff between the member states.
Europass	Europass offers as portfolio of five documents all European citizens the possibility to present uniformly their abilities acquired in the school, at the university or within the scope of learning stay or training stay abroad. The five documents included in Europass are: Europass-Curriculum Vitae is a uniform template for the presentation of personal data which gives a comprehensive and standardised overview about work experience and educational background of the holder. Europass-Language Passport is a clear presentation of the linguistic proficiency and language experience of the holder. Europass-Mobility Certificate represents an instrument for documentation of learning experience and work experience which were gathered in other country participating on the Europe initiative. Europass-Certificate Supplement is an accompanying description of the professional or vocational certificate about competences and qualifications which were acquired with the education/training of the holder. Europass-Diploma Supplement contains detailed statements about the acquired academic degree of the holder. Website to Europass: Austria: http://www.europass.at ; Germany: http://www.europass-info.de ; Switzerland: http://www.ch-go.ch/programme/europass ;
Skill	The ability to apply knowledge and use know-how to fulfil the tasks and to solve problems. In EQF, the skills are being described as cognitive skills (logical, intuitive and creative thinking) and practical skills (skillfulness and application of methods, materials tools and instruments).
Formal learning	Formal Learning is learning everything according to the organised curriculum, e.g. the lessons in the school, in the university etc. Normally, there are teachers and learners,

Term	Definition
	wherein the teachers want to teach the learners and the learners want to learn or should learn. Formal learning is usually characterised in this way that there are selected methods to achieve defined learning goals and to pursue a graduation.
Function	A ***function*** is a (e.g. occupational) job or position with clearly defined task, activity and responsibility, which somebody has in a larger context (e.g. in an operation or event). For the exercise of a function, the corresponding competencies and if necessary, a formal qualification is required.
Informal learning	Informal learning is being described as learning everything that takes place in situations which are not primarily intended for learning. That can be in everyday life, in the family circle, in the leisure time or at work. Typical for informal learning is that nobody intends to teach or to learn and that no certificate can be issued for the acquired knowledge and ability. One learns through experience, that means, through seeing, hearing, feeling, doing etc. and thereby, thinking about what it means. Therewith, one can apply consciously the learned experience in similar situations and it can become an action strategy.
Knowledge	The result of the processing of information through learning. Knowledge describes the totality of the facts, principles, theories and practice in a field of work or study. In EQF knowledge is being described as theory and/or knowledge of facts.
KMU	KMU is an abbreviation for the description of small and medium-sized enterprises (*"Klein- und Mittelunternehmen"*) and describes enterprises with 1-250¦500¦1500 employees depending on the country-specific definition.
Competence	***Competence*** describes the ability to use available knowledge and skills as well as personal, social and/or methodical abilities particularly for solving problems, as well as the readiness to do this also (occupational actionability). Competence can be proven through certificate of available or learned knowledge, skills and abilities, and can be used in different situations in life, learning, and other living situations.
Learning result	The term learning result is understood to mean what a learner after completion of any learning process or at the end of a learning phase should know and be in a position to do (which knowledge and competence should he have). The learning results in ECVAET 2 are to be found again in the national developed analysis charts.
Non-formal learning	Non-formal learning takes place always if one intends to learn something, but does not want to tread traditional educational paths. So, a learner community in WWW where one gets information for designing a website cannot be formal learning. Also, completely private "self-learning language course" falls in this category. Typical for non-formal learning is that there is no lesson plan and no graduation, but the situations are being chosen consciously as learning condition.
Qualification	A (formal) ***qualification*** is that formal result (certificate of competence, attestations, diplomas, certificate, school certificate or title) of an assessment and validating procedure for determination of available competencies, measured and confirmed by a responsible office or authority according to applicable standards. A formal qualification can be the prerequisite for the excercise of occupation or function.
VPLT	VPLT – The Association for Media and Event Technology (*Der Verband für Medien- und Veranstaltungstechnik e.V.*) The German association of the sector represents around 1000 members of the event technology. Fuhrenkamp 3-5 | 30855 Langenhagen | Germany

Term	Definition
Workload	Workload in context of ECVET is the expressed expected workload in clock hours which is necessary for a successfully completed part or stage of (training) education. The workload is measured in clock hours and can be composed of the following factors: Contact hour (attendance time in the course), self-study, preparing and following up an event, exam preparation, creation of thesis, other activities (practical training, excursions, etc.).
Certification	Certification is the formal attestation of the acquired competencies and/or completed education and further training as (recognised) written document (school certificate, certificate of competence, diploma, certificate), that is awarded by an official (accredited, independent) office. Through the certification, results of formal learning as well as of the non-formal or informal learning can be validated.

Annex C: Competence matrix

Annex D: Safety matrix

Annex E: Education and training plan

Annex F: Education modules