

Master Craftsperson Qualifications across four European countries:

Austria, Germany, Slovenia and Sweden

Andrea Laczik Kat Emms Dana Dabbous Aunam Quyoum

February 2024

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Executive Summary

- The Master craftsperson qualification is a form of continuing vocational education and training (CVET) which allows individuals to combine extensive knowledge of the theory of their profession with practical skills. Across the case countries with a Meister qualification can serve as a pathway for professionals within a craft or industry and generally has four main aims, to:
 - Receive formal recognition of their skills or craftsmanship (which may feature on a Master craftsperson register)
 - Equip individuals with business knowledge within the craft or trade to set up or take over an existing business
 - Develop knowledge and skills to train apprentices within the craft or trade
 - Assume management or leadership responsibilities within the respective craft and associated trade bodies.

There are potential benefits to a CVET system that incorporates a Meister qualification, such as ensuring progression routes, professional development, life-long learning and developing a talent pipeline through training apprentices. However, a wholesale introduction of Meister qualifications is questionable and challenging within a system without a history of the qualification. Meister's in different historic and cultural contexts demonstrate considerable differences in what a Meister may achieve (see case studies). While the key elements may be introduced in a new context they may not bring the expected outcomes.

- This research is seeking evidence for how other countries that embed a Master craftsperson qualification in their skills system benefitted (or not) from it and offers pointers to other countries for consideration.
- For the purpose of this research we focused on Germany, Austria, Slovenia and Sweden. For the unique characteristics of Master craftsperson qualifications on each country case study, see Appendix 1. The following table helps compare and contrast aspects and key ingredients of Meister qualifications and examinations in the four countries.

	Austria	Germany	Slovenia	Sweden
Policy intent/ primary desired outcome	Enables holders to work in an executive position carrying out complex tasks, or being able to manage a company and train apprentices.	Allows independent practicing of a craft, and to set up and run their own business. It qualifies an individual to employ and train apprentices and offers access to crafts academies, universities of applied sciences and universities.	It offers better opportunities for jobs in the profession, and a competitive edge for the business, because the brand of a Master emphasises mastery and quality of products or services. They were introduced after Slovenia's independence to encourage people to start businesses.	It signals professionalism and excellence in the field, and helps to preserve 'crafts'.
When was Meister implemented	ter Meister going back to society from the		Established in 2000 following independence (1991)	Based on the historical guilds system for professions, pre 20th Century.
Crafts, sectors and occupations	79 skilled crafts (<i>Meisterprüfung</i>) and in 39 non-craft trades (<i>Befähigungsprüfung</i>)	In 53 crafts, which are regulated by law. Also, there are other industry Meisters at Level 6 EQF ¹ e.g. commerce or electrician (industry related).	There are 52 Meisters for different crafts.	Specifically focuses on 'crafts' rather than any professional trade. There are approximately 305 craft occupations for which it is possible to gain a Meister.
Candidate criteria	By law, anyone aged over 18. In practice, candidates hold a relevant specialist professional qualification, usually an apprenticeship diploma, and relevant specialist practical experience.	Anybody who has successfully completed their initial apprenticeship can, in principle, take the Meister examination without gaining years of work experience.	Must have 1-3 years of experience in their field, depending on level of secondary or higher vocational/ technical qualification they have previously obtained.	The applicant must be active in the profession and have around 4000 hours of industry validated knowledge, documented training and experience in the profession. In some crafts this can go up to 10,000 hours, and in practice, many often have 10-30 years of experience.

¹ EQF (European Qualifications Framework (EQF). For equivalences see: <u>https://qualifications.pearson.com/en/support/support-topics/understanding-our-qualifications/frameworks-eqf.html</u>

Continued	Austria	Germany	Slovenia	Sweden
Key elements of the examination	A total of five modular exams - modules 1 to 3 are subject, technical exams, module 4 is the entrepreneurial exam, and module 5 the IVET trainer exam.	Four independent exams: Practical; Theoretical examination (subject specific knowledge); Examination in business, commercial and legal knowledge; Examination of knowledge for vocational and occupational education.	Four examination parts: practical work, professional- theoretical work, managerial-economic work and pedagogical- andragogical work	A vocational test that must demonstrate whether the examinee is well versed in the profession and has the required knowledge, skills and abilities at the required level. Not all crafts have a practical component.
Examination preparation	Preparation courses are not mandatory but attended by the majority of examinees. The duration and content of these courses vary, it is the responsibility of the respective establishment itself to design these courses.	Candidates are not required to attend a preparatory programme, however the trade associations develop standard programmes that the chambers officially recommend to their members.	It is not obligatory to attend any classes beforehand. The majority of candidates use self-study material to prepare themselves for the examination. In some cases, classes for individual exams are offered.	Applicants are expected to attend a 10-week part-time, distance learning programme with subjects related to entrepreneurship and business management. Offered by Leksand Folk High School, which is organised in combination with the Swedish Crafts Council. Some crafts may have individual additional programmes.
Infrastructure and stakeholders	The Economic Chamber (Wirtschaftskammer) has overall responsibility for Meister examinations, but they are managed at the Länder (state) level by the offices for master craftsperson examinations, which are located at the regional Economic Chambers. Employers also play a key role in the development and support of examinations.	Chambers of Skilled Crafts offer preparatory courses. The Chambers of Crafts are responsible for organising and conducting all examinations for Meisters in crafts. Social and economic partners have a consultative role and they also contribute to legislative processes in the area of CVET.	The examination is the responsibility of the Chamber of Crafts and Small Businesses	Crafts are defined and regulated by the Swedish Crafts Council. The Crafts Council collaborates with industry organisations, educational bodies and companies, to establish test regulations.

Continued	Austria	Germany	Slovenia	Sweden
Costs and funding	The fees for proof of competence examinations (Befähigungsprüfungen) are av. €550, and for master craftsperson examinations av. €371. The examination fees are paid for by the candidate.	Meister usually costs between Euro 8-12k/ year (depending on sector), which includes the programme costs and examination Statutory entitlement to financial support is available in the form of grants (this does not need to be paid back if the qualified Meister starts their own business and employs someone.) Scholarship programmes are also available.	The cost of the examination is av. 2000 Euros, depending on the profession. Costs are covered by the individual, although sometimes employers will cover the costs.	Fees are set by individual professional committees for each industry. They are relatively low. They are usually paid by individuals. Sometimes employers will cover part of the fees.

Key drivers and inhibitors of master craftsperson qualifications across the four study countries

Drivers	Inhibitors ²
Can support career progression (e.g. managerial/ executive positions; within and between companies)	May not be widely recognised within business or wider society
Encourages and provides life-long learning/progression opportunity	In some cases, laws/regulations are required to give the qualification value
Supports entrepreneurship	May not be recognised within the formal qualification system
Offers a marker of quality or brand for business and cus- tomers	Can require a long history/culture of Meister to give it prestige
Enhanced training capability for apprentices within their company/talent attraction	Can be difficult to define crafts/sectors for inclusion
Supports the preservation of niche crafts or heritage crafts	Meister is the highest level of vocational qualification. Therefore progression routes post-Meister may be need- ed in addition, such as higher level of business skills for example in running a large organisation.
Offers the individual personal accomplishment, increased confidence and sometimes a new title	Offering craft/progression-specific preparation classes can be costly if student numbers are low.

² NB. Benefits and drawbacks may only apply to some countries, not necessarily all countries

Introduction

The Master craftsperson qualification is a form of continuing vocational education and training (CVET) which allows individuals to combine extensive knowledge of the theory of their profession with practical skills. Often historically linked to national craft guilds or trade associations, a person who achieves the status of Master craftsperson ranks above a journeyman and apprentice (IPPR, 2011). In addition to the professional and external recognition the qualification can offer, it can also serve as a pathway for professionals within a craft or industry to:

- Start a business within the craft or trade, or take over an existing business
- Gain certification to train apprentices
- Receive formal recognition of their skills or craftsmanship (which may feature on a Master craftsperson register)
- Assume management or leadership responsibilities within the respective craft and associated trade bodies (Hogeforster et al., 2018; UNESCO, 2015).

However, as the European Commission (2016) notes in its report on higher VET across the EU, it is often not clear what European Qualification Framework (EQF) Level 'Master' craftsperson qualifications align to. There is no cross-country consensus on this, however the qualification is typically offered between EQF Levels 5-7. For example, in Germany the *Meister* certification is equivalent to Level 6, the same level as Bachelor degrees – although they are not directly comparable due to the vocational nature of the *Meister* qualification (Büchter et al., 2012).

As the qualification often sits within the continuing VET space, it is not typically funded by the national government and is usually administered by private providers and regulated by industry related bodies and national chamber of craft organisations. Master craftsperson qualifications are structured very similarly across countries and many often look at the German speaking countries as an example model.

Within these countries 'Meister' qualifications offer another progression route to higher learning.

Aims and research approach

This research is seeking evidence for how other countries that embed Master craftsperson qualifications in their skills system benefitted (or not) from it. Master craftsperson qualifications are embedded in the skills system in a number of European countries. For the purpose of this research we focused on Germany, Austria, Slovenia and Sweden. The research was based mainly on desktop research. The availability and quality of existing relevant documents in English varied across the case study countries. Consequently the case study reports reflect this unevenness. However, we have interviewed/consulted two country experts from each case study country in order to fill the gap in the literature and further develop our understanding of the Master craftsperson qualification in the respective country⁴. Finally we have asked our experts to check the case studies for factual errors.

⁴ Some of these country experts have stated they would be willing to engage further to discuss potential implementation and can be contacted through the researchers at Edge Foundation.

The research was led by a list of questions that guided the research process in the literature review and the semi-structured interviews. The questions included:

- What does 'Meister' mean in the different contexts?
- What are 'Meister' qualifications?
- Who has access to them?
- What are the components of the programme?
- What are their benefits/drawbacks?
- Who are the stakeholders who support them?
- How are they funded?
- Why (if) do employers engage with 'Meister' qualifications?
- What infrastructure exist in the case studies to support 'Meister' qualifications?
- What is their contribution to the national/local economy?
- How (if) do 'Meister' qualifications contribute to or fit in with the existing skills systems?

This report turns to four case studies of Master craftsperson qualifications in Austria, Germany, Slovenia and Sweden before outlining some considerations for policymakers in countries who may consider introducing such a qualification.



Austria

Context and VET system

Austria has a small population (almost 9 million), yet it has seen a continuous increase in the size of the population since the mid-1980s, mainly due to the growing influx of foreign nationals, which has risen particularly sharply in recent years. The country is consistently ranked in the top 20 richest countries in the world by GDP per capita (World Bank, 2019). Its economy has a strong industrial base, comprising many export-oriented small- and medium-sized enterprises (SMEs) - of all enterprises, 99.6 percent are SMEs. Most employment growth in the coming years is expected to be in public sector and defence, accommodation and food sector, and education (Cedefop, 2022).

Austria has a low youth unemployment rate (6.9%, OECD, Mar 2022), compared to the OECD average of 10.9%. One of the main factors explaining this success is the high participation in vocational education and training (VET) and the major role VET plays in the Austrian economy, for example with initial vocational training taking place within organisations. At the age of 15, all secondary students either take the (dual) apprenticeship route or continue in school. The secondary school route includes the "Gymnasium" academic pathway (taken by around 30% of students; in 2015) or a vocational school, taken by around 70% of students, which is far higher than the OECD average of 46 precent (OECD, 2017). Compared to other countries, VET programmes in Austria have a high attractiveness for young people; they offer flexibility and diversity ensuring that relevant training caters to regional economic variations and different interests of the student population. This includes the Austrian apprenticeship system, which similar to other Germanophone countries, is regarded as strong and offers a range of professional examinations designed to deepen or widen the professional skills of apprentices (Musset et al., 2013). Appendix 2/A shows the structure of the Austrian education and training system.

Employers and social partners have high levels of strong engagement in the postsecondary VET system, notably through the role of the Economic Chamber (Wirtschaftskammer Österreich, WKO) and Chamber of Labour (Arbeiterkammer, AK) (Trampusch, 2009). Employers are active members of many commissions and coordination councils and have substantial influence on the VET system (Musset et al., 2013).

Nevertheless, Austria's labour market and skills system faces the challenge of an ageing population, as in many other EU countries. In 2017, 25% of the Austrian population were aged 60 years or over; by 2050 the share of this population segment is expected to increase to over 37% (UN, 2017). It has been noted that early skills learned in VET at a young age may prove more of a disadvantage at age 50, with low youth unemployment could mean higher old-age unemployment later on; in Austria, 16.8% of the workforce over 50 years old are unemployed (Langley, 2022). One way to combat this would be to increase the participation of older adults in continuing vocational education and training (CVET). In 2020, 11.7% of adults were in lifelong learning⁵ (Cedefop, 2022). This is below the EU-wide target that was set for 2020, to get an average of at least 15% of adults participating in lifelong learning in the EU.

The Meister qualification in Austria

The Master Craftsperson (Meister) qualification is an examination, which forms part of the optional continued professional development offering in Austria. It is designed to deepen or widen the professional skills of graduates

⁵ Percentage of the population aged 25-64 participating in education and training over the four weeks prior to the survey

of the apprentice system, and although many Meister candidates hold such a qualification, it is not a prerequisite to have done an apprenticeship and can be taken by anyone above the age of 18. It is intended for those who intend to run their own business in their trade or craft sector and upgrade their skills (the *Meisterprüfung* for those who work in a regulated crafts and the *Befähigungsprüfung* in regulated non-craft trades). The objectives of the Meister qualification in Austria are to have comprehensive specialist competences, enabling holders to work in an executive position carrying out complex tasks, or being able to manage a company and train apprentices.

This can currently be taken for 79 skilled crafts (Meisterprüfung) and in 39 Befähigungsprüfung (regulated noncraft trade) (Appendix 5/A). This means that they are offered in more than half of the dual VET pathways currently on offer in Austria (there are approximately 215 dual VET routes).

As can be seen in the diagram of the education and training structure of the Austrian system in Appendix 2/A, the master craftsperson (Meister) qualification is an officially recognised vocational qualification, which can be taken from the age of 18. It is the highest level of professional training in Austria, and since September 2018 has been mapped to level 6 of the National Qualifications Framework (NQF) Austria, making it equal to a bachelor's degree (see Figure 1).

Figure 1: National Qualifications Framework, Austria

NQF level	Qualification type	EQF level
8	Doctorate (Doktorgrade)	8
	Level 8 professional qualifications in the health sector	
7	Master degree (Master- bzw. Diplomgrade)	7
6	Bachelor degree (Bachelorgrade)	6
	Master craftsman (Meister)	
	Engineer (Ingenieur)	
5	VET college/school leaving certificate – 5-year programme (BHS) (Reife- und Diplomprüfung der berufsbildenden höheren Schulen)	5
	Level 5 professional qualification awarded by the Federal Ministry of Defence – Staff Non-Commissioned Officer (Stabsunteroffizier oder Stabsunteroffizierin (StbUO, Erstverwendung))	
	Level 5 professional qualification awarded by the Fedral Ministry of Justice – Executive Judicial Officer (Exekutivdienst in der Verwendungsgruppe E2a im Justizressort ("Dienstführenden Grundausbildung" – mittleres Management))	
4	VET cchool qualification – 3 and 4 year programmes (BMS) (Abschluss der berufsbildenden mittleren Schile)	4

Since the 2002 amendment to the Trade, Commerce, and Industry Regulation Act (Gewerbeordnung or GewO), an apprenticeship diploma is no longer a prerequisite for taking the Meister examination. Now the only legal stipulation is that the person must be at least 18 years old. The diagram in Appendix 2/A shows that people can take the Meister route straight from school-based VET or an apprenticeship. However, in practice, exam candidates hold a relevant specialist professional qualification, usually an apprenticeship diploma, and relevant specialist practical experience. A key Stakeholder explained that very few would take the examination without

relevant qualifications and experience as it would be almost impossible for them to succeed. Furthermore, a part of subject module exams 1 and 2 is waived for candidates with a relevant specialist apprenticeship diploma.

In 2015 a survey of Meister candidates showed that the vast majority (82%) acquired an apprenticeship diploma as their initial VET (IVET) qualification before taking the master craftsperson examination (MCE). For over 88% of respondents, the specialist area of their MCE was the same or related to their IVET qualification (ibw, 2016). Furthermore, many candidates also have a substantial amount of experience; 90% had at least one year of professional experience, and 27% did not take the examination until they had acquired ten years of practice (ibid), despite there being no legal obligation to acquire professional practice as an access criterion.

The examination

The qualification is offered exclusively on the basis of the exam performance. Since 2004, master craftsperson examinations have been regulated in the form of modular exams. The examination comprises a total of five modular exams - modules 1 to 3 are subject exams, module 4 is the entrepreneurial exam, and module 5 the IVET trainer exam. Modularisation allows students to take different parts of the exam at different points in time, individually adjusted according to the needs of exam takers (OECD, 2013). The five modules consist of the following:

- 1. Module 1: technical-practical part A and B (If the candidate holds a relevant final apprenticeship examination, they do not need to take part A)
- 2. Module 2: technical-oral part A and B (If the candidate holds a relevant final apprenticeship examination, they do not need to take part A)
- **3. Module 3:** technical, written part (Module 3 is replaced by certain fields of study, university of applied sciences courses or higher vocational schools specified in the examination regulations)
- **4. IVET trainer examination** (the successfully completed entrepreneurial examination replaces the trainer examination)
- 5. Entrepreneurial examination (WIFI, 2022)

IVET trainer module

Given the importance of in-company training in Austria, the ability for companies to train their own apprentices becomes crucial, and the person must be qualified to do this demonstrated by the fourth module of the Meister qualification – the IVET trainer examination. This is an essential competent of the Meister qualification but can also be a standalone qualification for aspiring trainers. The WIFI website outlines several skills that a trainer should have in order to offer excellent vocational training to young people. These include social competence, professional competence, leadership qualities, assertiveness, conflict resolution skills, flexibility, and patience. The IVET trainer examination is an oral exam, which consists firstly of 30 minutes preparation time of a practice-oriented case study. This case study is then discussed in a technical discussion that lasts between 30 minutes and 1 hour. The content of the case studies is outlined in Appendix 3.

The entrepreneurial module

The entrepreneurial examination is the same module across all trades and allows the successful candidate to show they have the knowledge that is necessary for successful commercial management. It includes the ability to deal with the most common tasks and problems in a company. It acts as a prerequisite for self-employed

practice of a craft and some regulated trades. The examination consists of both written and oral components. It includes the following tasks:

- project work
- jurisprudence
- marketing
- accounting
- communication
- behaviour within the company and towards persons and institutions not belonging to the company
- organisation
- employee leadership and human resource management (WKOa, 2022)

Further details about the content of the entrepreneurial examination can be found in Appendix 4.

Examination responsibilities

The Economic Chamber (Wirtschaftskammer) has overall responsibility for Meister examinations, but they are managed at the Länder (state) level by the offices for master craftsperson examinations, which are located at the regional Economic Chambers. There are nine of these offices across Austria, each covering a delegated region, thus reflecting the local economy and local companies (Tritscher-Archan & Schmid, 2016).

Employers play a key role in both development of the examinations and supporting the examinations themselves. Companies are represented in the Economic Chamber, and therefore their subject expertise is drawn upon for the exam content for the three subject modules (ibid.). During the examinations themselves, company representatives also sit on the exam committee. The head of this committee is an expert from outside the craft area. This is important for quality assurance reasons. Due to recent developments of the examinations (detailed below) specialist organisations have been involved in order to ensure the exam tasks are competence-orientated in manner.

In terms of the success of the examination, about three quarters of all exam candidates pass the individual modular exams at the first attempt. For those that do need to re-take the examination, most state that personal reasons were the main reasons for failure previously, for instance they had not studied enough, or were insufficiently prepared (ibw, 2016).

Preparation for the examination

Preparation courses are not mandatory but attended by the majority of examinees (around 87% - ibw, 2016), and do not lead to any qualification. Preparation courses are offered mainly by the Institute of Economic Promotion (WIFI) (Wirtschaftsförderinstitut) of the Austrian economic chambers and the Vocational Training Institute (bfi) of the Chamber of Labour and Austrian Trade Union Federation. Private providers can also set up their own preparatory courses, with very little regulation. The duration and content of these courses and the course material are not regulated in a uniform manner throughout Austria – it is the responsibility of the respective establishment itself to design these courses (Tritscher-Archan & Schmid, 2016). However, the examination directive (Prüfungsordnung) does play a key role when designing these courses. The objectives of the examination (i.e. the learning outcomes) are listed, and the courses should therefore be designed to reach these LOs.

15

A survey of graduates taking the Meister qualification was carried out in 2015 and sought their views concerning their reasons for attending preparatory courses. The reasons mentioned included: the courses created more security and confidence for them since usually the entire exam syllabus is covered in the courses; courses enable exchanges with other exam candidates; and candidates felt they would be unable to pass the exam without attending the course.

Furthermore, these attendees rated the course highly, with the majority being "very satisfied" with them. However, the main criticism concerning the course was the high costs associated with them. In particular, courses connected with the master craftsperson training were higher in cost compared to programmes offered by universities and universities of applied sciences which are largely free of charge or are financed by the State (ibw, 2016).

On the other hand, 13% of exam candidates to not attend preparatory courses. For these people taking the above survey, just under a third (30%) stated that they could learn everything through self-study, particularly those with an occupation-specific IVET qualification. It is thought that many of these have already acquired the knowledge required in their previous education and training, and only require themselves to refresh this through self-study. The examinations are usually taken after several years of professional experience, and so for some this could be another reason they believe they are well-prepared for the exam without attending a preparatory course. It has been stated that in general, candidates for the master craftsperson qualification acquire most of their knowledge and skills informally, i.e., on the job.

Companies also play a major role in the preparatory courses (both in the non-formal and the formal sector). Many lecturers in these courses come directly from practice and are therefore able to bring their know-how and competences to the classroom (Tritscher-Archan & Schmid, 2016).

Finance and funding

The Meister examination must be paid for by the candidate. The fees for proof of competence examinations (Befähigungsprüfungen) are on average of €550, and the fees for master craftsperson examinations are approximately €371 (key informant, WKO, 2022).

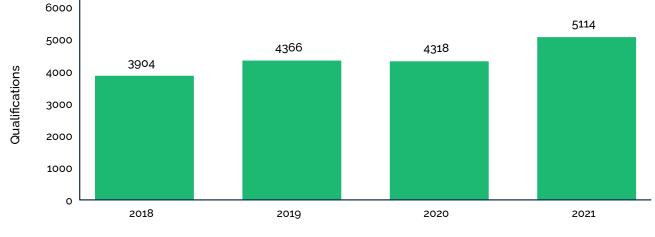
Although preparatory courses are not mandatory, many candidates choose to pursue these which comes at variable lengths and costs. Students have to pay tuition fees but grants are available in all Länder (OECD, 2013). Financial support for preparatory courses from employers is common.

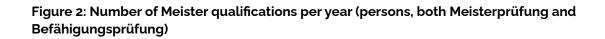
Outcomes of the Meister qualifications

Consistent data on those taking and completing the Meister certificates does not appear to be widely available. In general, the number of participants of Meister examinations does not equal the total number of those that completed "Meister", as the examination is modularised.

Austria	2017	2018	2019	2020	2021
The number of participants of Meister examinations	21,066	19,915	21,165	20,220	23,596

The figures over the last few years are largely stable, with a slight upward trend over a longer time period (up from 17,931 in 2005). The number of people actually qualifying on the Meister qualification in Austria can be seen in Figure 2. In 2021 the number of qualifications was 5114. Again, the numbers have been growing over the last few years and significantly so over the last decade, when in 2010-11, the number of obtained Meister qualification was 3,536.





Source: WKO statistics, 2022

People who have successfully passed the Meister examination are entitled to refer to themselves as "Meister" (or "Mst.") for males and "Meisterin" ("Mst.in" or "Mstin") for females, before their name as a title in official documents (e.g. in passports). This reform aimed to make the systems more permeable, increase the prestige of the vocational "Meister" qualifications (similar reforms have been undertaken in Germany) and provide a level of prestige and respect to those who hold the qualification. The company owner is also entitled to use a quality label for their trade, which designates the company as a "Meisterbetrieb", to show that they have completed their Meister qualification (Tritscher-Archan & Schmid, 2016).

As mentioned previously, the main objectives of the Meister examination in Austria are to deepen or widen the professional skills of the individual above their initial vocational training. It allows the candidate to set up and run their own company in their trade, and allows them to become IVET trainers by offering proof of knowledge and skills related to vocational pedagogy and law. However, candidates choose to pursue the Meister qualification for a range of reasons. Figure 2 shows the expectations that candidates had before taking the MCE and whether these expectations were met, according to the 2015 ibw graduate survey. Most frequently, participants voiced expectations linked with their desire to acquire a subject-specific further qualification (76%) and a higher qualification (67%). Many of the answers related to securing or better positioning themselves in the labour market, whether that be with their current employer or elsewhere. Almost half of candidates (47%) were doing it as the basis for becoming self-employed later. The fulfilment of this expectation was not quite as high, with 38% claiming this had been fulfilled after the exam.

Around one third (31%) of the interviewees mentioned the improvement of their social status as a motive for taking the MCE, showing the prestige that could be associated with the qualification (ibw, 2016).

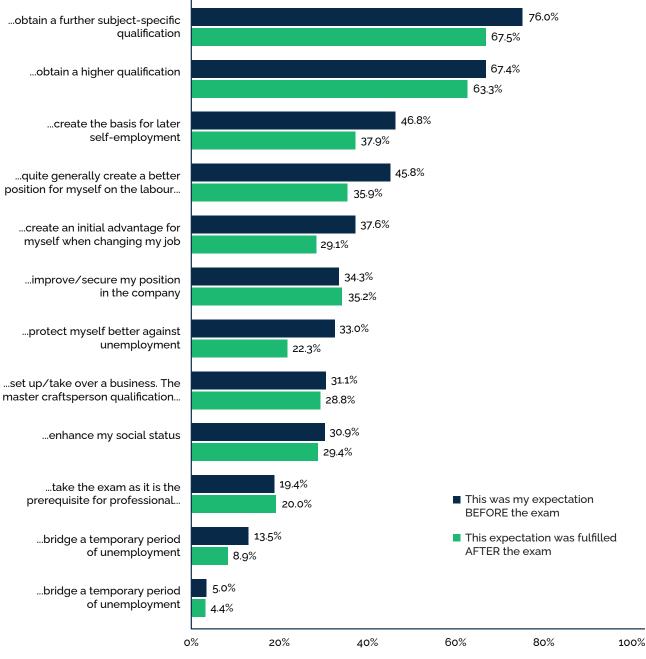


Figure 3: Expectations before the MCE – expectations met after the MCE: I wanted to...

Source: WKO statistics, 2022

The findings of the ibw study found that 60% of the respondents had a change in their career profession after the exam. For many the completion of the Meister qualification had led to higher positions in their current organisation, particularly having managerial and/or decision-making powers. Many others move company. While higher roles were often taken on, the share of those who had carried out skilled workers' activities before the exam declined sharply after having done the examination (from around 60% to 25%). Many also go on to become self-employed by starting up their own business or taking over another. Almost one in two (49%) who had changed company had the motive beforehand of becoming self-employed (ibw, 2016). Graduates benefit from a raise in income after the exam, with 43% of the respondents stated they received this post-examination. For some this higher salary was combined with a change of position in the company (27%). For a smaller proportion, the higher income came but with their main activities remaining the same (16%).

Finally, there were other, potentially unintended, consequences that were associated with the MCE that the graduate survey covered. Ninety percent of the respondents stated that there were at least one of theses additional benefits. These tended to relate to personal values and feelings, such as gaining prestige and improving their self-image – both personally and professionally. Improved confidence was also cited as a knock-on effect.

A further outcome of the completion of the MCE is that it can open further learning pathways for students, notably the ability to enter tertiary education. Holders of a master craftsperson qualification can gain access to universities and universities of applied sciences (UAS) (VET with degree element) by taking the Berufsreifeprüfung exam (Musset et al., 2013, p18). Appendix 2/A shows these pathways. In principle, master craftspersons can apply for admission to bachelor's degree courses at Austrian UAS; often however, they need to complete additional examinations (such as in English and mathematics). Master craftspersons can also teach occupation-specific practice at vocational schools (Tritscher-Archan & Schmid, 2016).

Recent initiatives and developments

In the last few years the NQF has been used in Austria as a framework for reform and development of VET qualifications, with particular attention to VET at higher levels (Cedefop, 2021). In 2018 the master craftsperson qualification was allocated to NQF level 6, giving it the same qualification level as the academic degree Bachelor, thus displaying the high esteem for the VET qualification. With this increase in visibility of the master craftsperson qualification, Austria has actually come a significant step closer to the intention of becoming the "land of masters" as stipulated in the previous government's programme (Kainz, 2018). The success in anchoring the master craftsperson title in law and registering it as an NQF 6 qualification also allows it to be more internationally recognisable, through its qualification and quality.

An upshot of the formal assignment of the Meister's title to level 6 NQF has been the "fit4NQR" initiative, which aims to bring a higher quality to the master qualifications and ensure that consistency is present across the qualification. One of the aims of the initiative was to ensure that more than 100 master craftsperson and qualification examinations will be designed from scratch by 2022. This includes ensuring they are all competenceoriented and future-proof, for example in terms of digitisation and innovation (Kainz, 2018). The revision of these qualifications has been praised for improving understanding and use of the learning outcomes approach based on NQF principles. Strengthening the quality of the qualifications was a key element of this.

As the Chairwoman of the Federal Division of Trade and Crafts in the Austrian Economic Chamber, Scheichelbauer-Schuster, stated the "fit4NQR" initiative to increase the specialised skills: "...is an upgrade that is good for the trade. We need more master craftsmen in Austria to strengthen the business location in the region" (Schalko, 2020).

By 2021, 36 new competence-oriented master craftsman examination regulations came into force. Furthermore, more than 100 workshops have been held so far to revise further master craftsman and proficiency tests. WKO (Austrian's economic chamber) state that the process has been very successful, particularly through making the standards visible, as they are now all clearly specified and documented. This revision will continue for even more of the examinations (WKO, 2022b).

Another initiative currently under development to support the Meister qualification is the "Masters Alumni Club". This is intended to act as a network for all Meister in Austria. The intention is to create contacts for the individuals,

to promote the recognition of vocational training, and support further education and success. The concept is currently in development and so we are yet to see whether it is a success. (WKO, 2022b).

Further evaluation of the qualification

Perceptions and esteem

As an expert from WKO explained, over the last few years the Meister has become more popular for two main reasons. Firstly, the qualification was allocated to NQF level 6, raising its esteem and increasing the visibility of the Meister: *"The image is very high in Austria...every year more people are trying to take the examination in the Meister."*

With the allocation of the Meister at level 6 of the NQF, parents, and students themselves, now have the security that they can take the apprenticeship/vocational route and still achieve the same level as a bachelor's degree. People are seeing that the employability is very high with the Meister, and so it is regarded as a very suitable alternative to an academic pathway.

Secondly, since the pandemic people have looked for new orientations, and had time to consider changes to their lives and occupations. This is leading to more people wishing to be independent and become their own boss.

One of the findings from the 2015 Meister graduate survey (ibw, 2016) was that some graduates believed master craftspersons should be shown greater appreciation. They stated that although they didn't believe that the Meister should be made 'academic', it should be recognised as much as academic routes in that more recognition should be given to higher vocational qualifications which are obtained outside the tertiary sector. It could be said that since then this has been addressed formally in terms of giving it NQF level 6 status.

Progression from the Meister

A limitation of the Austrian Meister which was highlighted by an expert at WKO is that since the NQF is at level 6, this is the highest level that can be reached on the vocational pathway. More advanced competencies around financing, human resource management etc. that support the individual in growing a company may be missing. There is no obvious progression route for master craftspersons. At the moment they would have to change the "route", i.e. move from the field of work to the field of study and start an academic programme. This is the reason Austria is in the process of developing a higher-level VET route at level 7 (Höhere Berufsbildung), similar to Tertiär B in Switzerland and to the Höherqualifizierende Berufsbildung in Germany. A master craftsperson could then take this qualification as a next step.

A strong tradition

A major feature of the Meister is that it focuses on quality. It is regarded as a "sustainable philosophy" to be a Meister in Austria – it provides good-quality, strong roots for a business. It offers the security that someone has the right to do the job as a business leader, and the qualification gives recognition to that. An expert from the WKO noted that in fact *"it is a success story of the German-speaking countries because they have the long tradition of this Meister qualification".* Consequently, it may be a challenge for a country that doesn't have that tradition within the economy and businesses to implement a Meister qualification from scratch.

Germany

Background

Germany has a population of 83 million people (OECD, 2020) but its population is ageing and the annual population growth in 2020 was 0.1%. However, its population has increased due to migration since 2013. Germany has a strong economy supported by the dual vocational training system developing a highly skilled workforce. Leading industry is manufacturing, in particular, automotive, mechanical engineering, chemical and electrical industries. There is high employment rate, unemployment of the labour force (15-74 year olds) is 2.9% (Destatis, 2022, online). Germany has the lowest youth unemployment rate within the EU with 5.5% (Destatis, 2022, online). In 2016, there were just over 3.46 million SMEs in Germany with the vast majority, 3.1 million being micro enterprises with up to 9 employees. In Germany, SMEs employ 29.1 million people. Micro and medium sized enterprises play a major role in offering apprenticeship places. In 2016, they offered 1.12 million apprenticeships as opposed to large companies (over 249 employees) offering 450,000 apprenticeship places.

Vocational Education and Training in Germany is known to have organically developed since the middle ages where employers and other social partners have been actively engaged and proactively shaped the VET system. This led to a VET system of high quality linking to labour market, and employers' needs and demands. The German dual system is often seen as an example of excellent practice but difficult to replicate elsewhere due to, for example, existing social dialogue between stakeholders and long-standing culture appreciating VET. About half of young people after secondary school continue in vocational education and training and 70% of these participate in the dual study programmes, higher apprenticeships (Cedefop, 2019). An increasing number of dual study programmes allow young people accessing university programmes and therefore increase the attractiveness of VET programmes. Nevertheless more young people are accessing universities hence pursuing a different pathway, leaving unfilled apprenticeship places.



National standards and training regulations govern apprenticeships and are developed by experts designated by employers and trade unions. While these standards ensure quality and labour market relevance, at the same time they offer flexibility for the development of in-company training plans tailored to the specific needs of the apprentice and company. The German VET system is underpinned by social dialogue between policy makers and the social partners and this safeguards any changes and reforms introduced to VET - be it updating or developing new occupational standards or responding to the challenges of, for example, digitalisation and changing skills needs of the labour market. Cross sectoral elements of occupational standards are regularly updated according to labour market demand; in average every 8-10 years. The world of work is continuously impacted by mega trends like digitalisation, climate change and the ongoing pandemic, hence occupational profiles and training regulations should reflect this accordingly.

The latest modification of these cross sectoral, interdisciplinary elements, such as sustainability, digitalisation or health and safety, happened in 2021 and came into force from 1 August 2021. (<u>https://www.cedefop.europa.eu/en/news/germany-modernised-occupational-profile-items-all-training-regulations</u>). For earlier dual training occupations these regulations are recommendations. These training regulations supplements are irrespective of occupational profile and include minimum standards in 1) company, VET, labour and tariff law, 2) health and safety at work, 3) environmental protection and sustainability and 4) digitalised world of work (ibid).

In Germany, policy makers historically voiced and demonstrated by their acts that 'Academic and vocational education is of equal importance to us' (Albert Rupprecht, education policy spokesman for the CDU/CSU parliamentary group at the German Bundestag, 2014) and 'The Union's parliamentary group stands for the equality of academic and vocational education' (Dr Thomas Feist, CDU, 2014) (see also under funding Meister craftsmen qualification).

The German VET system includes initial and continuing education and offers progression opportunities to learners. The following programmes are available (See also Appendix 2/B):

At upper secondary level (ISCED level 3):

- general vocational programmes with vocational orientation;
- school-based VET programmes;
- apprenticeship programmes (incl. WBL of ca. 75%);

At post-secondary non-tertiary education (ISCED level 4 and 5):

specialised programmes;

At tertiary level:

- advanced vocational qualifications and exams at EQF level 5 (certified advisor in specific professional areas; technician), EQF 6 (master craftsperson, specialist) and EQF 7 (management expert; vocational pedagogue, IT-Professional);
- technician, specialist and similar programmes;
- [professional] bachelor programmes;
- [professional] master programmes (Cedefop, 2019, p17)

Meister craftsperson

Meister qualifications have been known to the German society from the middle ages. Hence they are well-known and accepted. Meisters have always been trusted for their professionalism and the quality of their service.

The dual training is fundamental for continuing any higher vocational training. A completed apprenticeship qualification in a craft or in exceptional circumstances working in the craft for many years is necessary to embark on a Meister examination. This progression route looks like: craft specialist at Level 5 EQF, Bachelor Professional (e. g. Meister) at Level 6 EQF, and Master Professional (e. g. Conservator / Restorer) at Level 7 EQF. Master professional can as well be a strategic qualification for developing businessmen for crafts (e. g. Business Economist in Crafts).

Meister Craftsmen Diploma, now Bachelor Professional, signals progression opportunity for apprentices. This means that first and foremost, young people learn the profession i.e. the craft during their apprenticeships before they learn how to run a business or train other apprentices. This approach is considered holistic and sustainable for developing highly professional individuals.

The Meister qualifications represent higher vocational forms of the VET system and is part of Germany's continuing vocational education and training (CVET). The Meister craftsmen qualification has been at Level 6 in the German Qualifications Framework and it also aligns with the European Qualification Framework (EQF) at Level 6. This is the same level ascribed to any academic bachelor degrees. Techniker (Technician) qualifications Framework in also offered at EQF Level 6. Both, Meister and Techniker, are formally linked to the German Qualifications Framework in. The wording "higher-qualifying VET" was introduced with the revision of the Vocational Training Act in 2020, which also gave all Meister craftsmen the new title "Bachelor Professional". This title distinguishes bachelor in VET from the academic bachelor degrees but signalling the same level. For example, a Meister craftsman in carpentry can also use 'Bachelor Professional in Carpentry' on their business card.

The new title was introduced partly to make the VET route more attractive to young people. There is the issue of academisation in Germany whereas young people are more inclined to continue their academic studies after post-secondary education. However, some argue that the dual model plays a key role in socialising young people and young people benefit from this personally and professionally.

One of the reasons to link Meister to the EQF was to signal international customers and competitors the level of competencies Bachelor Professionals have. In some countries a degree level qualification is often needed to secure a job or contract, for example, building an organ, and this latest development ensures German craftsmen's formal competitiveness in the international economy.

In Germany, there are occupations where Meister qualifications are necessary for independent practicing of a craft, and to set up and run their own business. Meister qualifies to employ and train apprentices and offers access to crafts academies, universities of applied sciences and universities. The list of Meister qualifications are defined by law (see Appendix 5/B). Currently there are 53 such crafts, similar number as apprenticeships in craft. Crafts are regulated by law and the Vocational Education and Training Act is mirrored in the crafts' act. Chambers' regulations are based on the Vocational Training Act.

Not all Meister qualifications are in crafts, there are other industry Meisters at Level 6 EQF, such as commerce or electrician (industry related) Meister. Anybody who has completed an initial apprenticeship training can take the Meister examination, consequently the chamber in any industry sector that has dual apprenticeship training can apply to offer higher VET and offer Bachelor Professional qualifications. These Meisters from other sectors have to be legally regulated before they can use the title Bachelor Professional. In crafts, however, Meister has been offered traditionally, they have a different legal background and are regulated differently from other industry sectors.

The role of social and economic partners

Social and economic partners play a key role in continuing VET (CVET). This aspect of the German system has evolved over time and considered the most important cornerstone of their system. Social and economic partners have a consultative role and they also contribute to legislative processes in the area of CVET. Chambers of Skilled Crafts offer, for example, preparatory courses for the Meister craftsperson examination. There are 53 chambers of crafts in Germany and they operate over 600 training centres. Consequently, there is a strong infrastructure supporting both apprenticeships and Meister qualifications.

Enterprises in crafts by law are members of the *Handwerkskammer* (Chamber of Crafts), which organises the vocational education in the craft in a city or region. The model, as it works in Germany, has been criticised for promoting restrictive practices. The Chambers of Crafts have important statutory duties in the field of vocational training such as they are responsible for organising and conducting all examinations for apprentices and Meisters in crafts. The state delegates this official task to the chambers. The Chamber of Crafts have to register all apprentices in their area, make sure companies fulfilling their training obligations, make sure companies have the requirements to train and the chambers are also responsible for the examination. They name the examination boards but the examination boards are independent from them. Examination boards hold the master craftsman examination at the Chamber, the Chamber issue the master craftsman diploma and registering businesses in the Register of Craftsmen (IPPR, 2011).

Meister craftsperson examination

The master's examination is divided into four independent parts, each with its own rate of fees.

- 1. Practical examination (masterful performance of activities)
- 2. Theoretical examination (subject specific knowledge)
- 3. Examination in business, commercial and legal knowledge
- 4. Examination of required knowledge of vocational and occupational education (Hamburg Chamber [no date])

Part 1 of the examination includes the 'masterful' production of a masterpiece related to the craft which is assessed based on the demonstration of:

- Idea and creativity
- Difficulty level
- Process of design and application of theory
- Adherence to planned dimension and cost calculation
- Quality of design and finished product (Hogeforster et al., 2018).

Meister craftsperson qualifications do not require to attend a preparatory programme, however the trade associations develop standard programmes that the chambers officially recommend to their members. This is a standard quality assurance procedure across all regions and across all trades/crafts. These standard programmes are not obligatory to follow but they are strongly recommended by the Chambers of Crafts.

Meister candidates may attend full-time or part-time preparatory courses. These can be undertaken over time and the four parts of the examination can spread out. The Chamber of Crafts offer these preparatory programmes in their training centres but other training providers similarly offer these programmes. While curriculum is

Germany

not specified, examinations are clearly defined on the national level. Examinations and certifications happen through the Chambers. Meister candidates can prepare themselves while working and professional practice was required for taking the Meister craftsperson examination.

The duration or number of hours taken to complete the examination varies according to the requirements of each craft according to Part 1 and Part 2. For example, an individual in the roofing trade would typically acquire 632 hours of class time, whereas an electricians may undertake 1,320 class hours (Hogeforster et al., 2018).

There has been a change in accessing Meister craftsperson examinations recently. Earlier, the craftsperson had to have an IVET qualification and years of work experience to engage with the examination. Now anybody who has successfully completed their initial apprenticeship can, in principle, take the Meister craftsman examination without gaining years of work experience. This change has been introduced in in the amendment of the German Crafts Act 1. January 2004. The reason for this change can be explained by the fact that policy makers aimed at offering similar progression opportunities for young people regardless of whether they choose the academic or vocational route. It was felt that VET learners have experienced disadvantage and their progress in their chosen career took longer before they could engage in higher vocational learning. Hence policy makers wanted to develop a fairer system within which VET learners can progress without needing to spend more time in education and training and without delay. (Those young people choosing the academic route can progress with 'Abitur' to a university Bachelor programme and then continue without delay to a Master programme.)

Having the 'Meister' title usually comes with high reputation in the society and in professional life. Consequently, this new development removing the obligatory work experience before taking the 'Meister' examination has led to controversies. Young people with Meister but no work experience often promoted to a more responsible jobs only after a few years of working in the craft.

All four examination parts are developed at national level, enacted by the Ministry of Economics and compiled by social partners. Parts 3 (Examination in business, commercial and legal knowledge) and 4 (Examination of required knowledge of vocational and occupational education) are the same for all professions. Classes in the preparation courses for these two parts are from a range of craft and professions. However, what most have in common is the aim at running their own business. Those who work for large companies, such as car technicians, may run the company's workshop. This is a fertile learning environment to develop ideas and learn from each other.

The Meister examination is always held at the Chamber of Crafts, regulated by law and supervised by the local authorities. They are conducted by master craftsman examination boards, which act as state examination authorities at the Chamber of Crafts at the district level (Hogeforster et al., 2018). The examination board consists of representatives of employers, trade unions and VET schools.

Funding

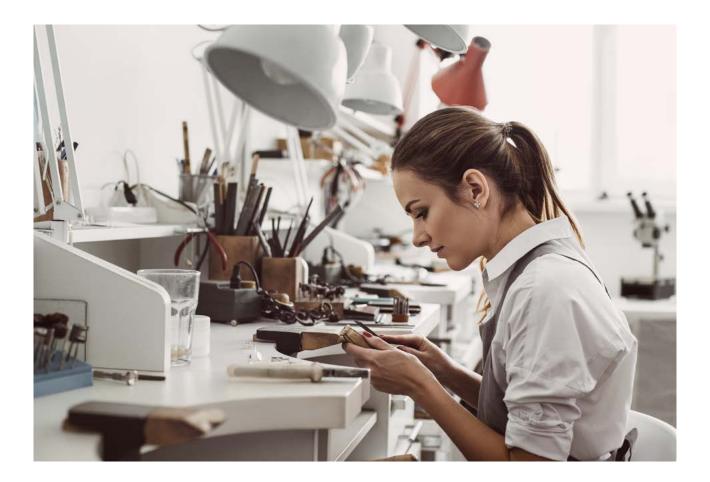
Germany promotes continuing VET and has introduced a number of incentives to support professionals. This federal support is in addition to employers' investment into their own workforce. Training companies finance the in-company training element of apprenticeships. Since 1996, the Upgrading Training Assistance Act (Aufstiegsfortbildungsförderungsgesetz , AFBG, known as Meister-BaföG) gives craftsmen and other skilled workers the statutory entitlement to financial support when signing up for further training or supporting living costs. This support is called Meister-BAföG and it works similarly to the university student grants (financial support of academic studies is called BAföG). Meister BAföG has been revised as part of the 2020 VET Act. Meister BAföG is now available for all those pursuing higher (EQF Level 5-7) VET. One can apply only once at each level. About 2/3 of Meister BAföG comes from the federal budget and about 1/3 from Länder. Funding can

cover living expenses, course fees and examination fees. If the learner successfully completes the qualification, starts their own business and employ someone, they do not have to pay back the loan. Meister usually costs between Euro 8-12k/year, for example, electricians pay £12k/year. The Act was amended in 2016 in order to *'improve the funding and support, and expand available funding options to new target groups. It increases VET career attractiveness'* (Cedefop, p.43). Meister-BAFöG said to be the most comprehensive funding instrument for CVET. There is also a scholarship programme (<u>www.weiterbildungsstipendium.de</u>) set up by the state which young people can access for their Meister examination. This programme targets the highly talented young professionals.

Final Reflections

The qualification more broadly reflects Germany's dual system which allows for permeability between academic and vocational education. Meister holders can gain free general access to higher education (Deissinger et al., 2013).

The Meister title protects professionals but at the same time offers customers security, assures the ongoing qualification of apprentices, and supports sustainable and well-established companies with job-opportunities. There is an expectation of high quality service attached to those who have this title. Meister (Bachelor Professionals) also supports social mobility and educational equality. Those who are Bachelor Professionals earn more than apprentices and the lifetime income of Meisters and graduates of an academic Bachelor in Germany are equal, as are the unemployment rates. Dual training and Meister offer individuals holistic training and participants grow as human beings.



Slovenia

Context

In 2020 the population of Slovenia reached 2,095,861 a 1.6% increase since 2015 (CEDEFOP, 2021). The population across Slovenia is ageing. The old-age-dependency ratio⁶ is expected to increase from 31 in 2020 to 54 in 2070. "The increasing old-age-dependency ratio appeared for the first time in the previous decade, partly because the large post-war generation started to retire, and as the smaller early-1990-born cohorts entered the labour market" (CEDEFOP, 2021, p.13). The main economic sectors of the Slovenian economy are:

(a) manufacturing (automobile, metallic, electronics, pharmacy and chemicals);

- (b) service sector;
- (c) construction.

Unemployment has been steadily falling, reaching 4.5% in 2019 and increasing slightly to 5% in 2020, which is lower than the EU average (7.1%). Unemployment for those aged between 15 and 24 is higher than for the age cohort 25-64 (CEDEFOP, 2021). There was an impact from COVID-19 on the economy, this resulted in an employment reduction in manufacturing, administrative and support service activities and accommodation and food services (OECD, 2021). In April 2021, the Slovenian Government initiated a national recovery plan, which aimed at building the resilience of the education system through strengthening competences for the digital and green transition, to respond more quickly to the needs of the economy (CEDEFOP, 2021). Similar to the global trend, the challenges of automation and digitalisation have affected workers in vulnerable jobs that are more affected by technological change.

VET System

According to the Ministry of Education, Science and Sport in the Republic of Slovenia, basic school education is compulsory until the age of 15 this includes primary and lower secondary school and is state funded. After completing basic education students in Slovenia can continue into two to five years non-compulsory upper secondary education (Ministry of Education, Science and Sport Republic of Slovenia, 2019).

After completing compulsory basic education, vocational education and training (VET) students have a choice of upper secondary programmes:

- Technical upper secondary programmes are four-year programmes that lead to vocational *matura* a secondary school leaving exam, with two general and two vocational, theoretical and practical exams. These programmes consist of 40% general subjects and at least eight weeks of in-company work-based learning.
- Vocational upper secondary programmes are three-year labour-market-oriented programmes and offer two paths:
 - a. school-based path: approximately 20% (at least 24 weeks) of the programme is undertaken at an employer and the rest at the school (consisting of general subjects and VET modules)
 - b. apprenticeship path: a minimum 50% of the programme is undertaken at an employer, while at least 40% general subjects and VET modules is delivered in school.

⁶ The old-age to working-age demographic ratio is defined as the number of individuals aged 65 and over per 100 people of working age defined as those at ages 20 to 64.

Students do have the option to change paths midway. After the completion of these exams at this stage, students can either enter work or enrol in a two-year vocational technical education programme leading to vocational matura.

More students enrol in upper secondary vocational programmes than on average across the OECD (66%, compared to the OECD average of 46%). The employment rate for the population with vocational education (mainly 25-34 year-olds) is 80%, compared to the OECD average of 77% (OECD, 2016, p.9). Since 2010, adult participation in education and training (age 25-64) has been reduced by eight percentage points (from 16.4% in 2010 to 8.4% in 2020). For the first time since 2010, it declined bellow the EU-27 average (9.2% in 2020) (CEDEFOP, 2021, p.20). Slovenia's development strategy 2030 aims at 19% participation of adults in lifelong learning by the end of the decade (ibid., p.21).

Master Qualification in Slovenia

Master craftsperson (Mojster) qualifications are traditionally understood as formal continuous vocational education and training (CVET) in the Slovenian VET system and are seen to be a key part of adult education training and learning (see Figure 1). It is a way that an experienced employee can be promoted to a more demanding work position without requiring the next educational level.

Master craftspersons exams are open to individuals with either upper secondary vocational education and at least three years of relevant work experience; upper secondary technical education and at least two years of relevant work experience; or short cycle higher vocational education and at least one year of relevant work experience (Logaj et al., 2013). After completion of the Master craftsperson exam individuals gain the equivalence of an upper secondary technical education. The details of progression within the different VET qualifications in Slovenia are outlined in Appendix 2/C.

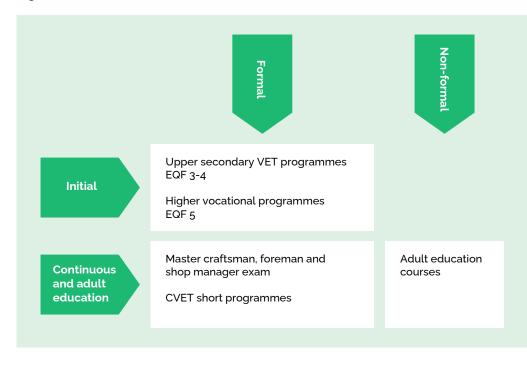


Figure 4: Initial and Continuous VET in Slovenia⁷

⁷ https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/slovenia-2019

Characteristics of 'Mojster' Qualifications

Master craftsperson, foremen and managerial examinations provide a vertical progression route within the dual system. The Chamber of Craft and Small Business of Slovenia has been performing master craftsperson exams since 2000 for 52 titles of different crafts⁸ (see Appendix 5/C). They were introduced after Slovenia's independence to encourage people to start businesses. Master craftsperson exams are performed for the majority of occupations that are in short supply and for which no regular secondary education programmes are on offer. Master craftsperson qualifications in Slovenia offer better opportunities for jobs in the respective profession, and a competitive edge for the business, because the brand of a Master emphasises mastery and quality of products or services. The Master craftsperson qualifications that are available across various industries are illustrated in Appendix 5.

The examination of the Mojster is the responsibility of the Chamber of Crafts. According to the original legislation when the Mojster was first introduced, any person who wants to run their own craft business is obliged to pass the master craftsperson examination (Ivančič, 2008, p.180). However this has changed over time, and it is now not an obligation to hold the Mojster qualification. Passing of the exam is still required though for taking on apprentices in the person's company. Around 2500 people have completed the Mojster examination since it was introduced in 2000. With around 250 individuals taking part in 2020.

Why were they introduced?

Mojster qualifications were introduced in 2000 at the same time as the apprenticeship (dual) VET was established. Slovenia started to think about the introduction of these after their independence (in 1991), and they were developed to respond to the labour market needs of the country by encouraging the start-up of new businesses. Slovenia looked to Germany for inspiration, and in 1995 they sent VET teachers and professionals to Germany to study on their Mojster programmes. The experts then returned to Slovenia to share their new knowledge and to help establish the new Mojster qualification.

The master craftsperson qualification has the aim of offering training to employees in SMEs, to develop their competences, as well as offering people the opportunity to change professions and enter new areas of specialisation. Delivering excellence in specific crafts was seen as an aim when the master qualifications were introduced and a key requisite to opening your own business, although this prerequisite has since been dropped. In addition to raising the level of professionalism and quality in individual professional fields, master craftsperson qualifications also provide the opportunity to strengthen certain professions that are dying out in today's modern world (i.e. Shoemaker, Beekeeper, Upholsterer), and are no longer practiced across the mainstream education to remain alive.

Acquiring a Master Craftsperson qualification brings with it opportunities and advantages to the individual, including:

- Acquiring an additional professional education
- Completing vocational matura, and the opportunity to progress to higher vocational schools
- Individuals can be a mentor to high school and university students
- The master craftsperson are a brand representing excellence in products and services
- Master craftsperson can become members of the <u>Club of Masters of Slovenia</u> (KMS).

⁸ In addition to the 52 master craftsperson examinations, there are also 3 foreman (SI: delovodja) titles, and 2 shop manager (SI: poslovodja) titles. Exams for all these 57 titles are prepared with the same methodology and based on the same legislation.

Structure

Learning Outcomes

The structure of master craftsperson qualification in Slovenia is illustrated in Table 2. Within this, the learning outcomes follow the Slovenian Qualifications Framework (SQF) and are divided into Knowledge, Skills and Competence. The Knowledge component falls under SQF level 5 (EQF level 4) and is defined as:

General and/or specialised knowledge acquired through knowledge of different academic and/ or professional fields and theoretical principles. Represents a basis for further learning and slightly more advanced understanding of the discipline. Learning primarily takes place through analytical thinking (Logaj et al., 2013, p.79).

The Skills component falls under SQF level 5 and 6. Level 5 is defined as:

Wide-ranging skills in relation to the area of operation, may also be specialised, including the use of appropriate tools, methods, different technological procedures, materials and theories. Evaluation and use of information to formulate decisions and solutions to various problems or atypical situations. Formulation of solutions in connection with well-defined abstract problems (Logaj et al., 2013, p.79).

The Skills SQF level 6 (EQF level 5) is defined as:

Ability to carry out more complex operational/technical tasks linked to the preparation of works and control and management of work processes. Ability to carry out complex and usually specialised tasks in relation to the area of operation, including abstract thought and the use of appropriate tools, methods, different technological procedures, materials and theories (Logaj et al., 2013, p.79).

The final component is the *Competence* outcome and falls under SQF level 6 defined as:

Ability to operate in different and specific settings with elements of creativity. Autonomous activity characterised by taking responsibility for the work of individuals and groups, material sources and information. Ability to make basic connections and place issues in a general social context is also important. Identification of own learning needs and attention to knowledge transfer in work (Logaj et al., 2013, p.79).



Type of qualification (document)	Master craftsman (Master craftsman's examination certificate)
Category of qualification	Educational qualification
Type of education	Secondary technical education
Learning outcomes (SQF levels)	Knowledge: 5 Skills: 5-6 Competences: 6
Admission requirements	 Fulfilment of one of the following conditions: The candidate has obtained a secondary vocational qualification (any specialisation) and has at least three years' experience in the field in which he/she wishes to sit the master craftsman's examination The candidate has obtained a secondary technical qualification (any specilisation) and has at least two years' experience in the field in which he/she wishes to sit the master craftsman's examination. The candidate has obtained a higher vocational or professional higher education qualification (any specilisation) and has at least one year's experience in the field in which he/she wishes to sit the master craftsman's examination.
Assessment	The candidate sits a master craftsman's examination, which consists of four units: - a practical unit - a specialised theoretical unit - a business and economics unit - a teaching/instruction unit Candidates who pass all four units of the examination obtain the master craftsman's qualification.
Providers	Chamber of Crafts and Small Business of Slovenia
Assessors	Members of examination boards for each examination unit separately; appointed by the minister responsible for education; the appointment may be renewed every 4 years

Table 2. Structure of the Master Craftsperson Qualification in Slovenia (Logaj et al., 2013, p.97)

Examinations

An individual can apply to the master craftsperson examination by completing an application through the Chamber of Crafts and Small Businesses of Slovenia. The criteria are relatively straightforward and includes confirmation of their employment. The Chamber of Craft checks the fulfilment of the conditions of the candidates through examinations which a candidate has the opportunity to take at two points during the year. The exam consists of four parts: practical work, professional-theoretical work, managerial-economic work and pedagogical-andragogical work. Each part of the Mojster's exam is divided into examination units in accordance with the examination catalogue. Each part of the Mojster's exam is conducted before an examination committee consisting of 3 different types of committee: one for the first practical and second professional-theoretical part, one board for the third managerial-economic part, and a fourth for the pedagogical-andragogical part. The Chamber co-ordinates the running of the examination and it is there where candidates sit the examination. However the vocational schools play their part by the writing of these exams.

The majority of candidates use self-study material to prepare themselves for the examination and it is not obligatory to have to attend any classes beforehand. In some cases, classes for individual exams are offered. The programmes are prepared by the chambers, sometimes in collaboration with VET schools. However due to the cost and low numbers taking part in the examinations, it is usually not viable to run classes.

Candidates have a maximum three years in which to take all the examinations, however usually it will take the candidate around two years to complete.

Funding

According to the Chamber of Crafts the cost of the master craftsperson examination is on average 2000 Euros depending on the profession. The cost of the examination is covered by the individual candidate, although sometimes employers will cover the costs. In addition, most of the time, the candidate does not take time off from their work to do their qualification and therefore must do the preparation and examinations on top of their normal employment.

Progression

Upon completion of the master craftsperson gualification and based on examinations passed in the general education subjects of the vocational matura, candidates can continue their education at short-cycle higher vocational schools and professional colleges. These examinations come under the competence of trade chambers (CEDEFOP, 2017a, p.36). Higher vocational education in Slovenia is regulated by the Higher Vocational Education Act (2004). It is aimed at students who have passed the vocational or general matura, and also at candidates who have passed the master craftsperson/foreman/shop manager examination, three years' work experience and a test of knowledge of general education subjects at the level required for the vocational matura in secondary technical education. The vocational matura exams are composed of four exams, two of which are general subjects and the other two are either a Slovenian language or foreign language such as Maths, the candidate is free to choose.

According to the Chamber of Craft and Small Businesses website a challenge that can be said about acquiring a master craftsperson qualification is "becoming a master is a very difficult task... associated with acquiring various skills. In addition to knowledge of the profession and quality craftsmanship, masters must know the laws and pitfalls of various bureaucratic regulations". Master craftspersons must model professionalism to their colleagues and completing the exams means candidates are ready for an independent entrepreneurial path. Awareness of continuous improvement, development and growth is becoming important in the field of crafts.

An issue with the Mojster in Slovenia, highlighted by the Chamber of Crafts, is that there is narrow understanding in society about what the qualification is. There is not a long history of it in the country and therefore it is not so popular, as seen by the low uptake.

Sweden

Context and VET System

Sweden is a country with one of the highest GDP in the world. They have a high esteem for the education and skills of their people, and thus there is a high investment in education and reaching a high level of education is expected. Sweden has one of the highest rates of tertiary education in the EU at 52.2% (2019; EU average: 40.3%). Accordingly, the rate of participation in VET is low compared to its EU counterparts - 35.4% in 2018 compared to the EU average 48.4% (Cedefop, 2022).

In Sweden, compulsory mainstream education finishes at age 16. At this point, learners can continue on a general HE preparatory education, or follow a vocational pathway, either school-based or on an apprenticeship. All routes last three years before young people move into the workplace or into higher education or higher VET. Apprenticeship education as part of formal initial vocational education and training (IVET) was only introduced in 2011, and although in general apprenticeship participation is relatively low, the number of learners has grown steadily since then. There has been an average annual increase of over 1,000 learners between 2013/14 and 2018/19 (Cedefop, 2019), yet in 2018/19 this is still only 12.5% of all VET learners (Cedefop, 2018).

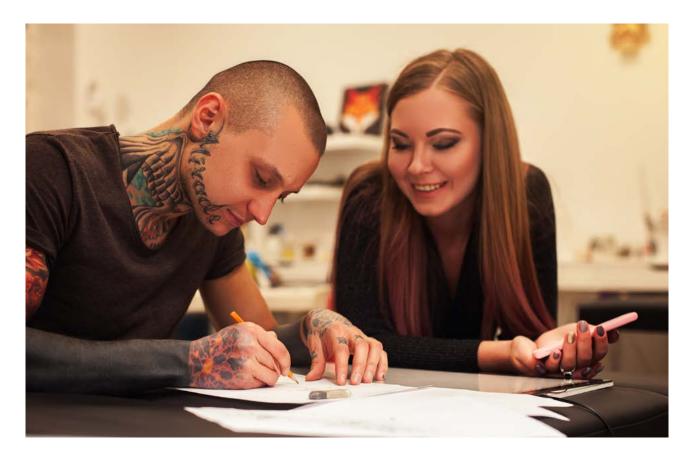
Crafts and its guild system

In Sweden, the Journeyman and Meister were introduced a long time ago, and are historically based on the guilds system. All professions were organised by guilds, and until 1846, people were not permitted to work as a particular craftsperson if they were not part of a guild and had not completed the Journeyman. After 1846 this regulatory system was disbanded, meaning that anyone could practice in any profession and there are no longer any regulations for starting a business – anyone is permitted to do this, with or without any qualifications.

In Sweden the Meister specifically focuses on 'crafts' rather than any professional trade. There are approximately 305 craft occupations for which it is possible to gain a Journeyman and subsequently a Master craftsperson's (Mästare) certificate (for a sample list of crafts see Appendix 5/D). These craft professions include baker, knitter, tattoo artist, stonemason, hairdresser amongst many others. These are defined and regulated by the Swedish Crafts Council. Although definitions of what constitutes a craft have changed over the years, they currently define a craft as a profession that requires doing something with the hands, and that has depth enough to be a journeyman craft. Considering this definition, some professions that used to be considered a craft are no longer, due to the introduction of technologies. However, there is a strong sense amongst some of the need to preserve their tradition of craftsmanship for their profession.

Building on the historical tradition of craftsmanship, for those completing an apprenticeship in a craft profession, there is the option to progress and complete the Journeyman test, which requires an average of two to three years of work experience or otherwise acquired professional knowledge. The completion of the test gives the journeyman certificate. For some larger fields, for instance roofing and painting, the journeyman certificate is weaved into the formal education, as it is an essential component to prove that the individual is a valid professional in delivering their work.

Building on the apprenticeship training, journeyman certificate, the Mästare certificate recognises the high professional skill level of an individual and their expertise to train apprentices. The Mästare label is recognised as a guarantee of high quality and is conferred by the Master's certificate. This acts as a guarantee for customers to find skilful and master craftspeople.



There are additional reasons for having the journeyman and Master certificates in Sweden in addition to the signal of professionalism and excellence in the field. It avoids distinguishes between amateurs and professionals, which is more important for some crafts than others (e.g. knitting) where there may be a large number of amateurs in the field (e.g. hobbyists). In Sweden, Master certificates are not necessary to start and run a business. Furthermore, for some smaller crafts it can be challenging to be taken seriously as a profession. For example tattoo parlours have had problems being taken seriously and have sometimes found it challenging to gain bank loans, or insurance for instance. With the journeyman and master certificates, it is hoped that this can help change this perception.

The Swedish Crafts Council is a non-partisan, industry-independent, non-profit association that works for the improvement of the craft professions and for increased understanding among the public, of the importance of vocational training and certificates of competence. The Crafts Council has an authority task to issue and revoke Master's Letters. In this work, the Crafts Council, in collaboration with industry organisations, educational bodies and companies, establishes test regulations for Companion and Master's letters.

Mästare certificate and course

To gain the Master craftsperson qualification from the Hantverksrådet (Swedish Crafts Council), a companion certificate is required which ratifies the practical and theoretical examinations taken. According to the Swedish Crafts Council, the applicant must be active in the profession and around 4000 hours of industry validated knowledge, documented training and experience in the profession and industry-validated knowledge is required to take the Companion test. In some crafts this can go up to 10,000 hours, and in practice, many who do their Mästare's certificate often have many more years of experience in their craft; generally 10-30 years of experience. The companion test is a vocational test that must demonstrate whether the examinee is well

versed in the profession and has the required knowledge, skills and abilities at the required level. Assessors are required to be neutral and are appointed by the industry on behalf of the Swedish Crafts Council.

Companion letters are available in over 70 different professions, which for example include, bakery, pottery, curtain making, masonry, carpentry, joinery, tailoring and boat building. A full list of professions can be found on the <u>Hantverksrådet</u> website. Not in every craft there is a practical examination for obtaining the Master Certificate.

Applicants are also expected to attend the Mästare's education programme which includes subjects related to entrepreneurship and business management. Courses are 10-weeks part-time, taken via distance learning. There is only one educational institution that offers Mästare training, Leksand Folk High School, which is organised in combination with the Swedish Crafts Council. The course focuses on knowing how to run a business, from communication, contracts, and administration. It also includes the different ways there are to organise a company. In addition to the general business knowledge, individual crafts may have individual programmes. For example, for hairdressers they have to be able to guide young people through the craft. This includes approximately eight additional hours of education in that field in order to prepare them for being a mentor or trainer. For skin therapist, the additional requirement is to prepare a case study which covers how they would give a treatment from start to finish, they would then present this to a mentor.

Finance and funding

The fees for undertaking the qualification are reviewed and vary according to the professional committee for each industry involved, for example the Tattoo Association will set and take the fees for that industry. As a general example, gaining a companion letter in bakery costs SEK 700 + VAT (SEK 875 incl. VAT, about £70), and the cost to obtain the Master's letter is SEK 2,000 + VAT (SEK 2,500 incl. VAT, about £200). Usually there is quite a low cost for the master certificate because there is an interest in keeping the skill, history and knowledge of the craft alive.

In general, fees are covered either entirely by the individual, or partly by the individual and partly by the employer. Some of the larger organisations will put in even more funding to support the employee. All funding is at the employer or sector level however, there is no support from the government or state.

Recent developments

The master's certificate is not, and has not previously, been classified within the Swedish qualifications framework. Although some argue that this would be advantageous, the Crafts Council did not want to pursue the EQF system for the master craftsperson. Not being part of the framework means that the masters certificate is not regarded at the same level as a bachelors on the academic route, despite the individual having a wealth and many years of professional experience in the crafts. Furthermore there are no progression routes beyond the master qualification, nor is there and interaction with the academic pathways, meaning that it does not allow a route to progress to a university degree.

A key objective of the Meister qualification in Sweden is to preserve the traditional crafts and their professions. It is based on a historical tradition and this may be one of the main reasons for people taking up the qualification in the country. However, given the lack of regulation in the Swedish 'free' system, the Meister qualification does not actually give the professional any additional rights, since it is not necessary to have it to start a business and no longer is a necessary requirement for vocational teaching. For some professions it may act as a 'brand' for their craft or business (e.g. tattooists), but for some (e.g. hairdressing) the customer is unlikely to know about it and to use it to distinguish between their choice of professionals.

Drawing together learnings from the four countries and considerations for policymakers

For many post-industrial nations the labour market has been changing rapidly with the transition towards netzero, the impact of the fourth industrial revolution, the introduction of new technologies and a growing demand for higher level technical and professional skills across the economy. It is important that skills systems look towards other world leaders to ensure continuous improvement and innovation. However, there is a longstanding academic literature pointing to the danger of 'policy borrowing' versus 'policy learning' – in other words of taking and transplanting policies from other jurisdictions and hoping that they will have the same impact as in their home context (Kersh & Laczik, 2021). The four case countries present some variations in the way the Master craftsperson qualification is constructed based on the German model. Nevertheless they demonstrate some common benefits of Meister as well as present differences and challenges.



In this report we have examined in detail four countries where a Meister system is in operation. A summary of the characteristics of these qualifications can be seen in Appendix 1. In these countries and contexts, it is clear that the Meister qualification brings a number of key benefits and enablers to the system, including:

- The Meister qualification may be used to support **career progression** and as a **lifelong learning** opportunity to build towards and demonstrate 'mastery' in a craft.
- It may be used as a requirement to start a business, often including elements of **entrepreneurship** that are relevant across every craft. Starting a business can become something aspirational for apprentices at all levels.
- Linked to this, the **'Meister' brand and title** can develop its own cachet and reputation as a **mark of quality** or guarantee for customers or clients, as well as an aspirational achievement for the craftsperson themselves.
- Within the training system, the Meister mark can be **required in order for the individual to train apprentices** within an organisation, aiming to increase the quality of on-the-job training within apprenticeships.

In all the systems looked at, the 'Meister' certificate was seen as distinguishing a true professional in their craft. However, there were significant differences between the way that the Meister qualification featured in the formal qualification system, and in the different systems we looked at for instance, it was pitched at different levels – EQF Level 4, Level 5, or Level 6.

The challenge of policy learning is increasing by the level of divergence between the 'home' nation's system where a policy was developed and the 'host' nation looking to import that practice. The historical context, economic laws and culture of the country can impact how well the Meister is positioned and accepted. In the case of the Master craftsperson qualification, clear differences appeared across the four case study countries. There are a number of key challenges and key success factors that are worth highlighting here:

- Infrastructure a fair and holistic funding system, employer engagement/social dialogue and training provider institutions are all required
- **Culture** prestige/popularity of VET is crucial; what are the understandings within society of terms such as 'craft', for instance, what defines a craft? Which crafts need preserving?
- Legal framework the existing education and training, and business law and licences to practice that support the Master craftsperson's examination; and/or the legal requirement to hold a Meister in order to run a business or train apprentices
- Meister as a brand recognised by society to what extent do wider society and businesses understand the qualification to be a marker of high-quality craft? And does it add value for the individual and/or their profession and/or crafts?

Master craftsperson qualifications, in the four case study countries, are considered a form of continuing vocational education and training (CVET). They are part of the higher vocational qualifications suite and they are at degree level (except in Slovenia). As such, individuals who hold the title 'Master' in their occupation are expected by the wider society and by the professional bodies to demonstrate high level professionalism, professional skills as well as theoretical knowledge. Master craftsperson qualifications across the four case study countries demonstrate similarities in <u>their aims</u> but also differences in the delivery mode and funding mechanisms. The German and Austrian Master craftsperson qualifications are the oldest and most well-established, and being used as the basis for this reflection. Sweden and Slovenia represent a modified version given their respective contexts. This becomes an important consideration when understanding their relative successes and how they are regarded by the general population in each context.

There are some clear links between a national strategy which hopes to develop skilled workforce and achieve economic success and the broad aim of Meister qualifications. For instance aiming to achieve international economic competitiveness and national transformation through high quality professionalism, development of business/trade knowledge (entrepreneurship), develop management and leadership in a business, aligns with key characteristics of the Meister qualifications explored here: for example, ensuring progression routes, professional development, life-long learning and developing a talent pipeline and training apprentices. However, a wholesale introduction of Meister qualifications is still questionable in a new country context and requires careful considerations. While the key elements may be introduced they may not bring the expected outcomes. This is largely due to historic and cultural context within which Meister operates. For example, in Germany the Meister qualification is needed in some crafts to set up and run their own company/business. The general public has a good understanding and clear expectations of a 'Meister' product or service. Meister qualifications are historically well-established in Austria, Germany and Sweden, yet still demonstrate considerable differences in what a Meister may achieve in these countries. Slovenia introduced Meister lately and faces challenges to the establishment and societal understanding of the qualification.

There are clear barriers to achieving certain positive outcomes of Meister where Meister (Master) has been used less. It takes a long time to change the perception of the society and to develop and ingrain the phenomenon of 'Master craftsperson' that is linked to professional expertise of highest quality and trustworthiness. Similarly, while it might be desirable to link business start-up/business management to a qualification (e.g. laws, regulations, budget and accountancy), the introduction of this idea may not be supported by economic partners. These elements of the Meister qualifications need culture change and can be only achieved over a long time.



Before decision is made whether or not to introduce the Meister qualification in a country, consideration would also have to be given as to how a new qualification might impact on its wider skills system. To support this, and building on the benefits outlined above, we have drawn out what we see as the four key underlying elements of the Master craftsperson for consideration and pose questions to contemplate:

Growth: Ensuring the professional establishment, development, growth and sustainability of craft businesses

Questions for consideration:

- How important are crafts across in the country context?
- What value would a Meister qualification add to existing skills programmes and progression opportunities in crafts already in place?
- What crafts would qualify?
- How would the Chamber of Crafts be set up to take on the responsibility for the Master craftsperson examinations? Or what role would it play?
- How does society recognise high quality professionalism?
- How (if) could Master qualification be linked to business start-up? What preparation is in place to support entrepreneurial/business skills development for crafts people?
- What law and/or regulation is needed to enforce such change?
- What pre-existing qualification or experience is needed to qualify for a craftsperson qualification?
- Quality: Developing and certifying high quality in-company trainers and mentors for vocational education

Questions for consideration:

- Who acts as in-company trainers and mentors?
- What qualifications/preparation are needed in the country to train apprentices?
- What provision already exist to train the in-company trainers? Is this sufficient?
- What role would training providers and employers play in developing and delivering this aspect of the Meister?
- Progression and Lifelong Learning: Guaranteeing progression opportunities and creating a clear aspiration for the next generation of craftspeople

Questions for consideration:

- What value would a Meister qualification add for craftspersons already in the workforce?
- What processes are in place in the countryto recognise prior knowledge, skills and experience and how will this factor into the examination? How will a master craftsperson title be recognised?
- What would be the criteria to embark on a Meister qualification?
- What progression opportunities will be available after achieving a master craftsperson qualification?
- What training provisions and other opportunities exist to promote and support life-long learning?

Conclusion

Across the four countries in this study, it has been shown that the Meister qualification can act as a badge of excellence within certain professions and crafts, ensuring clients or customers can recognise a craftsperson is of high quality. The qualification can also support life-long learning and career progression for individuals, whilst also supporting the next generation of craftspersons through ensuring quality on-the-job training of apprentices who are trained by the master craftsperson. However, through the research it has also been established that this branding and recognition of excellence is most successful in systems that have a long history of Meisters and thus it is well-understood within the society. In cases where this tradition does not exist, the advantages of the Meister tend to be grounded in individuals' personal sense of achievement.

As countries continue to respond to the changing world of work, the challenge for the future will be to ensure a consistent and high-quality supply of training programmes linked closely to the labour market. Careful thought will need to be given to the existing skills system and how any changes can be made complementary rather than introducing more complexity to the system. While variations of the Meister qualification have been introduced in some countries, policymakers would need to consider the balance of benefits and risks to decide whether some or all of the principles of a Meister qualification should be introduced into a new system.



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Appendices

Appendix 1 – Characteristics of Master Craftsperson Qualifications in the Case Study Countries

Austria

- Meister is an optional qualification and an apprenticeship is not a requirement, although the majority of candidates will have done one
- You can enrol on a Meister Craftsperson qualification from age 18
- It is intended for individuals who want to run their own business in a trade
- Three main objectives are: to have comprehensive specialist competences, enabling holders to work in an executive position carrying out complex tasks; to be able to manage a company and to be able to train apprentices
- It is the highest level of professional training in Austria at National Qualifications Framework Level 6 (same level as a Bachelor Degree)
- The qualification is achieved through performance of 5 modular examinations: modules 1 to 3 are vocational/ technical subject examinations, module 4 is an entrepreneurial examinations, and module 5 is the IVET trainer examinations
- The Master Craftsperson examination must be paid for by the candidate

Germany

- Long history of Meister Craftsperson from the middles ages
- Prerequisites for a Meister Craftsperson Qualification include: a completed apprenticeship qualification in a craft or in exceptional circumstances working in the craft for many years
- It is a progression opportunity for apprentices and is part of Germany Continuing Vocational Education and Training (CVET) and is at Level 6 in the German National Qualification Framework
- There are occupations where Meister qualifications are necessary for independent practicing of a craft
- The Meister examination is divided into four independent parts: Practical examination, Theoretical examination, Examination in business, commercial and legal knowledge and Examination of required knowledge of vocational and occupational education
- Individuals can run their own business or train others with a Meister Craftsperson qualification
- There are 53 chambers of crafts in Germany and they operate over 600 training centres
- Meister Craftsperson holders can gain free general access to higher education
- There is high quality service associated to those who have the Meister title. Meisters are well respected and well understood by society.

Slovenia

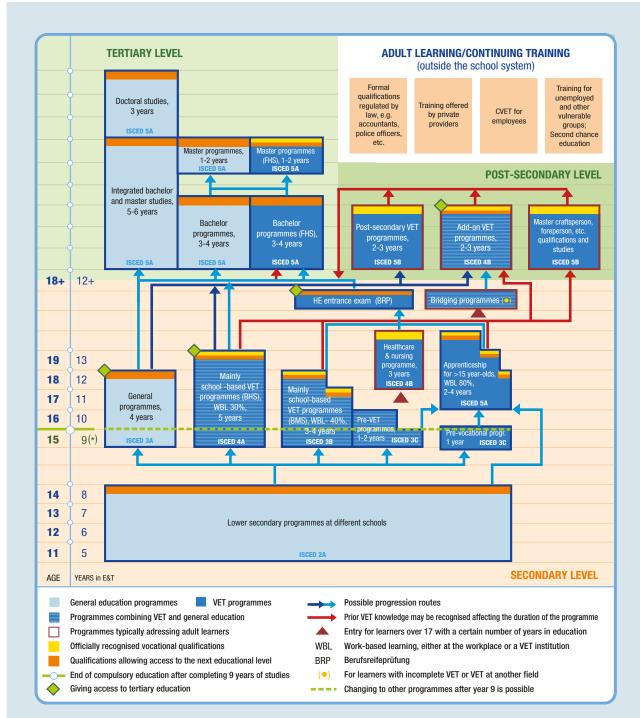
- Master craftsperson qualifications are traditionally understood as continuous vocational education and training (CVET)
- They were introduced in 2000 at the same time as the apprenticeship (dual) VET was established in Slovenia based on the German model
- An experienced employee can be promoted to a more demanding work position without requiring the next educational level
- The prerequisite for a Master Craftsperson qualification is: individuals with upper secondary vocational education and at least three years of relevant work experience; or upper secondary technical education and at least two years of relevant work experience; or short cycle higher vocational education and at least one year of relevant work experience
- Master craftsperson examinations are performed for the majority of occupations that are in short supply and for which no regular secondary education programmes are on offer
- A Master Craftsperson qualification is awarded after the completion of the examination which consists of four parts: practical work, professional-theoretical work, managerial-economic work and pedagogical-andragogical work

Sweden

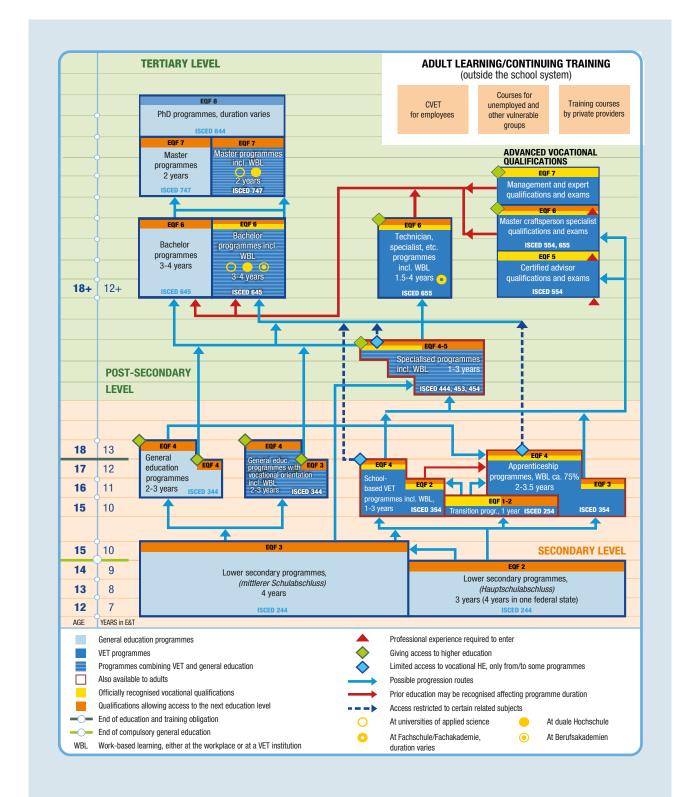
- Long history of Master Craftsperson qualifications and are historically based on the guilds system
- The Master Craftsperson specifically focuses on 'crafts' rather than any professional trade
- There are approximately 305 craft occupations for which it is possible to gain a Journeyman and subsequently a Master craftsperson's certificate
- It signals professionalism and excellence in the field
- The Master Craftsperson qualification builds on the apprenticeship training, journeyman certificate, and recognises the high professional skill level of an individual and their expertise to train apprentices
- The qualification distinguishes between amateurs and professionals, especially for customers, which is more important for some crafts than others
- In Sweden, Master Craftsperson certificates are not necessary to start and run a business
- Requirements of the qualification include completing a companion certificate which ratifies the practical and theoretical examinations taken and the applicant must be active in the profession and have around 4000 hours of industry validated knowledge, documented training and experience in the profession
- Applicants are also expected to attend the master craftspersons' education programme which includes subjects related to entrepreneurship and business management.
- The master's certificate is not, and has not previously, been classified within the Swedish qualifications framework.

Appendix 2 – Structure of VET Systems

VET in Austria's education and training system (Cedefop, 2011)

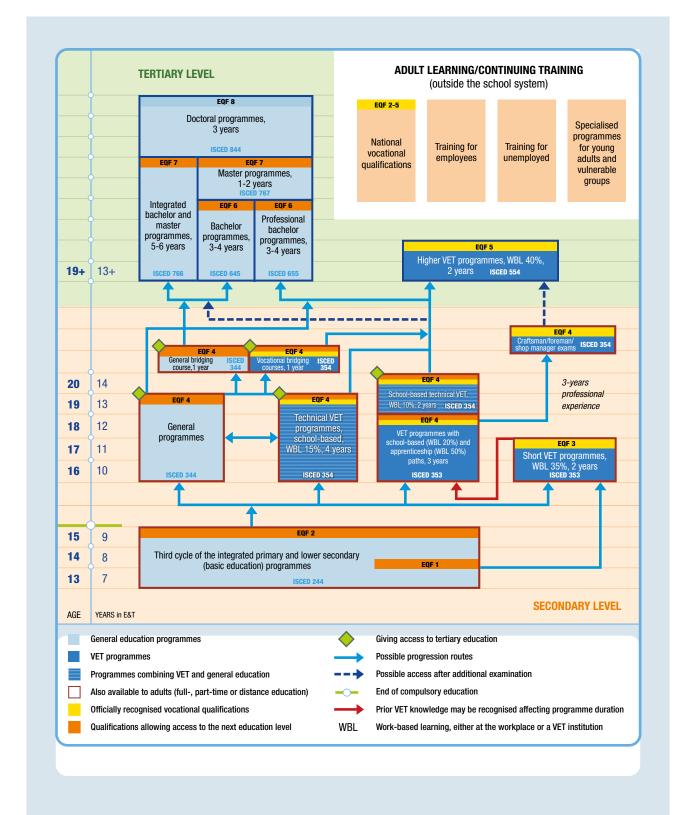


NB: This is a simplified chart based on a common format for all countries in EU-28+Norway and Iceland. ISCED 1997 was used in this chart. Conversion to ISCED 2011 is ongoing. EQF levels are being discussed. *Source:* Cedefop and ReferNet Austria.



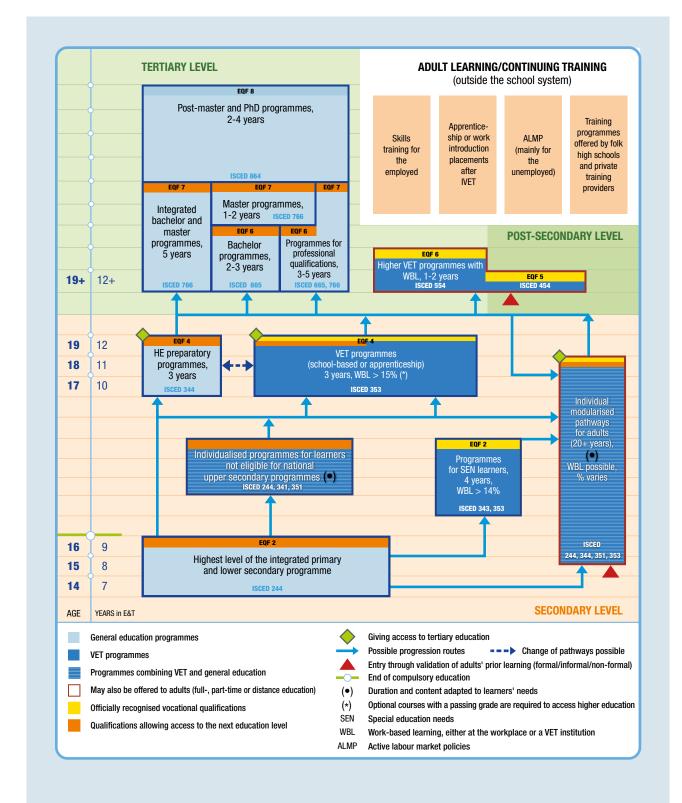
VET in the German Education and Training System (Cedefop, 2017c)

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VET in the Slovenian education and training system 2020/21 (Cedefop, 2021b).

VET in Sweden (Cedefop, 2011)



Appendix 3 – Austria: The IVET trainer examination – contents of the case study in the examination

- 1. Defining training goals based on the job description:
 - Analysis of the job profile with regard to training planning
 - Creation of individual training goals resulting from this
- 2. Training planning in the company:
 - Selection and conception of suitable training measures
 - temporal and organizational distribution of training activities in the company process to achieve the training goals
- 3. Preparation, implementation and control of the training:
 - Basics of company training methodology with special consideration of activating methods
 - Deployment of additional employees as part of the training
 - Use of training aids
 - control of success
- 4. Behaviour of the trainer towards the apprentice:
 - Tasks and responsibilities of the trainer
 - personality development of the apprentice and training success
 - leadership and motivation
 - communication and negotiation
- 5. Questions regarding the Vocational Training Act, the Child and Youth Employment Act (KJBG), employee protection, the Labor Constitution Act in connection with vocational training and the position of the dual vocational training system in the Austrian education system; relevant questions arising from examples of training practice.

(<u>WKO, 2020</u>)

Appendix 4 – Austria: The entrepreneurship examination

- (1) The aim of the entrepreneurial examination is to determine whether the candidate understands the connections between the areas of a company and can apply this knowledge when founding a company and when dealing with the most common tasks and problem situations in a company. It extends to the entrepreneurial knowledge required to practice a trade independently and includes the following subject areas:
 - Communication and behaviour within the company and towards persons and institutions not belonging to the company (suppliers, customers, banks, authorities, etc.),
 - marketing
 - organization
 - entrepreneurial legal knowledge
 - accounting,
 - employee leadership and human resource management.
- (2) The entrepreneurial examination consists of a written part (paragraph 3) and an oral part (paragraph 4). The time between the end of the written part and the beginning of the oral part must not be less than two hours and must not exceed three months.
- (3) The written part includes an interdisciplinary case study (project work) as well as selected comprehension questions and brief case studies from the areas of marketing, organisation and accounting. The project work can touch on all subject areas. The candidate must be able to expect to complete the written examination tasks in four hours; Two hours of this should be set aside for project work. The written part must be finished after five hours.
- (4) The oral part focuses on the subject areas mentioned in Section 1, Items 1, 4 and 6. The candidate is to be asked comprehension questions, with at least one case study being discussed. Except in justified exceptional cases, it must not be shorter than 20 minutes and no longer than 40 minutes. (WKO, 2020)

(<u>WKO, 2020</u>)

Appendix 5 – Lists of Meister Qualifications

Austria (2018 data)

Acoustics professional Baker Beauty care Binder Blasting professional Boat builder Bookbinder Builder Business consultant Butcher Cardboard goods producer Carpenter Case and Cassette producer Ceramicist Chimney Sweep Commercial financial advisor Confectioner Construction worker Consulting engineer Optics technician Coppersmith Decorator Debt collector Dental technician Detective **Electrical engineer Electronics engineer** Floor Layer Fountain master Funeral professional Gardener/Florist Gas and plumbing technologist **Gilders and Trimmers** Glass blower Glass grinders Glazier Gold and Silversmiths

Gold. Silver and Metal worker Grain Miller Gunsmith Hairdresser and Wigmaker Harmonica maker Heating technologist Hiring agent Hospitality worker Instrument maker Insultation professional Insurance agent Insurance broker Laboratory technician Ladies dressmaker Leatherworker Life and social councillor Linen manufacturer Manufacturer and processor Masseur Mechanical engineer Medical technologist Medicines manufacturer Men's dressmaker Metal worker Metal designer Milk technology Model maker Monument cleaner Optician Organ builder Orthopaedic professional Orthopaedic shoe maker Painter and Decorator Paver and Tiler Pedicurist Pest controller Pharmacist

Piano maker Piercer Plasterer Plastics processor Printer Property developer Property manager **Pyrotechnician** Real estate agent Refrigeration professional Roofer Sacks producer Safety specialist Sculptor Securities broker Security professional Shoemaker Sign maker Skilled worker Skinner Stonemason Surface engineer Tattooist Textile cleaners Timber construction master Tinsmith Tourist guide Transport agent Travel agent Upholsterers and decorators Vehicle Saddler Vehicle technologist Ventilation technologist Watchmaker Woodturner Woodwind instrument maker

Germany

Agricultural machine repairman Baker Bricklayer Boat- and shipbuilder Butcher Carpenter Chimney sweep Confectioner Dental technician Electric machine builder Electronics technician Glassblower Glazier Gunsmith Hairdresser Hearing aid audiologist Information electronics technician manufacturer

Installer and heating fitter Interior decorator Joiner Motorbike and bicycle mechanic Metal engineer Motor vehicle body construction mechanic Motor vehicle technician Optician (ophthalmic) Orthopedic shoemaker Orthopedic technician Oven and air heating builder Painter and varnisher Parquet layer Plasterer Plumber Precast concrete block

Precision mechanics Refrigeration mechanic Road builder Roll top mechanic Roofer Ropemaker Scaffolder Screed layer Stonemason Surgery mechanic Thermal and acoustic insulation fitter Tyre mechanic Well builder

Slovenia⁹

- 1 Car Repair Master 27 Master Building Glassworker 28 Leather and Fur Tanning Master Master Car Mechanic 2 Leather Goods Master 29 Master Baker 3 Leather Clothing Master 30 Master Chimney sweeper 4 Master Hairdresser 31 Mechanical Installations Master 5 Cosmetic Care Master 32 Master Clockmaker 6 7 Electronics Master 33 Biomechanics Master 8 Machine Mechanics Master 34 Confectionery Master 9 Master Optician 35 Master Upholsterer and Decorator 10 Master Dressmaker-Tailor 36 Electrical Installations Master 11 Master Carpenter 37 Telecommunications Master 12 Master Carpenter Seabream 38 Painting Master 13 Masonry Master 39 Casting Master 14 Master Butcher 40 Photography Master 15 Master Fur Clothing Maker 41 Master Tinsmith Roofer 16 Car Electronics Master 42 Master Goldsmith 17 Heat Metal Processing Master 43 Master Stonecutter 18 Master Metal Moulder 44 Iron Bending Master 19 Master Toolmaker 45 Car Painting Master 20 Paperhanging Master 46 Boilers Master 21 Model Carpentry Master 47 Ceramic Tiling Master 22 Master Barrel Maker 48 Master Florist 23 Master Shoemaker 49 Master Gardener 24 Metal Processing Master 50 Master Chef 25 Textile Maintaining Master 51 Catering Master
- 26 General Electromechanics Master

<u>https://www.ozs.si/english/master-crafstman-exams</u>

52 Master Beekeeper

Sweden (Sample list)

Armor maker Art framer Bagmaker Baker Barber Beekeeper Blacksmith Boat builder Boat renovator Bookbinder Builder Cabinet maker Car painter Car saddler Caricaturist Casting professional Charcuterie professional Chimney sweep Clock casting professional Construction worker Cooper Coppersmith Costume seamstress Culinary worker Curtain-maker Dress tailoring Driver Embroider Engraver Farrier

Floor Layer Florist Furniture restorer Gemstone grinder Glazier Glove maker Goldsmith Guilder Guitar builder Hair groomer & tailor Hairdresser Hand weaver Hatmaker Horticulture professional Hot forging specialist Hotel professional Installer Interior design Jeweller Locksmith Makeup artist Marquetry professional Masonry professional Masseur Meat master Nail therapy professional Needleworker Optometrist Painter Pastry chef

Photographer Piano technician Potter Printer Rigger Saddler Server Sheet metal worker Shoemaker Silversmith Skin therapist Steel engraver Stonemason Tailor Tanner Tattooist Tile stove maker Timber professional Tin casting professional Upholsterer Violin builder Watchmaker Weaver Wigmaker Winegrowers & Winemakers Boat building and renovation worker Wood Craftsman Wood sculptor



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