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BOLSTER-UP

Handbook for European Furniture Professions

PROJECT TITLE

Transparency for Upholstering and Cabinet Making Qualifications and Quality in the

European Furniture Industry

- Bolster Up -

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FOREWORD

This handbook is a result of the Leonardo da Vinci project "Transparency for Upholstering and Cabinet Making qualifications and quality in the European furniture industry – Bolster Up II". The project mainly aimed to the recognition of qualifications and competencies in two professions in the industrial furniture sector, cabinet making and upholstery, by enhancing their transparency and comparability and establishing joint, mutually recognized European core profiles.

These core profiles will support the activities to raise the quality of existing national VET programmes for cabinet making and upholstery by contributing to mobility through recognition of the identified common core profiles within Europe. For the future there is a high potential to use the results out of the Bolster Up project to enhance the profiles to real European core profiles with pathways of recognition. Therefore the involvement of more EU countries is recommended.

This publication focusses on the project documents we developed – they may be useful for others working with a similar issue – and the results surrounding the VET of these two occupations. The project also involved other subjects such as the issues of certification, implementation and improving the mutual trust of all actors involved. If you are interested in reading more about this project, please consult our website www.furniture-professions.eu

PROJECT BACKGROUND

Vocational training is an issue in Europe

One of the cornerstones of the EU, as well as one of its tangible assets, is its diverse cultural traditions, as well as the diversity of its habitats and social systems. The European Union does not seek to harmonise any of the various aspects of its diversity, but it does strive to achieve comparable living conditions for its citizens.[1] European unification remains a complex and complicated project, the goal of which is doubtless shared by the overwhelming majority of European Union citizens. However, the means of achieving this unification is very controversial. For example, the sharing of competences between the EU and the Member States has been, is often still and will continue, in the future, to be debated. This is perhaps not bad in itself, as, in every multi-level system, a balance must be continuously struck when it comes to allocating which level of government does what and which takes which decisions – otherwise the system becomes encrusted and dominated by the same people, thus rendering it dysfunctional.

Nonetheless, there are processes of convergence underway within the various Member States. These processes are, to a certain extent, becoming superimposed on the specific cultures of the Member States. One example is trade in goods: the same type and the same quality of goods can be purchased almost anywhere in Europe. New technologies are being introduced across Europe (and the rest of the World), thus tending to narrow the technological 'gap'. Transnational companies use the same technologies, procedures and processes in all countries. Standardisation plays a key role within this process of technological convergence. Nowadays, large-scale projects use the same techniques, materials and qualifications. And, in recent times, it has become clear that economic life and the convergence process taking place within economies are having a significant impact on other areas of life and politics.

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[1] As expressed in the preamble to the Treaty on the Functioning of the European Union: 'Anxious to strengthen the unity of their economies and to ensure their harmonious development by reducing the differences existing between the various regions and the backwardness of the less favoured regions'

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The different pillars of the education and training system are one of the most important sectors within society that have been affected, particularly the vocational education and training (VET) sector. VET policies are targeted at individuals. These individuals should be mature and able to work independently; they should be able to learn a fulfilling occupation that provides good prospects; they should be capable of keeping up an interest in their occupation and showing an ability to learn throughout their lives. VET policies should also ensure that there is a match between the potential of individuals and their professional careers, as well as companies' qualifications requirements. In recent times, other policy areas and other stakeholders have become the focus of attention, e.g. labour market policy.

The above-mentioned technological and economic convergence processes fall outside the EU's competences in the VET sector. The EU may have competence for the internal market, but it basically has no legal competence in the VET sector. 'Basically' is used here with care, as in recent years the EU has been very active, through the 'open method of coordination'[2], in the area of training, especially in the VET sector. Instruments have been developed (European Qualifications Framework, European Credit System for Vocational Education and Training (ECVET), etc.), which have an impact on national policies. The EU lifelong learning programmes are also policy programmes that encourage Member States, through financial incentives, to follow these EU-level policies.

The EU thereby creates links between policy areas, such as labour market policy and VET policy. In 2009, the European Commission presented studies relating to 18 different economic sectors, which examine the qualification requirements in the relevant sectors between now and 2020 and which provide pointers to further developments in the relevant occupational profiles. The EU's influence is becoming objectively ever greater.

Against this backdrop, and also because the European social partners in the furniture sector have long attached great importance to vocational training, the European Sectoral Social

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[2] The Commission uses the open method of coordination to influence national policies outside the legislative framework. This method includes coordination, bilateral or multilateral agreements and coordination, development of best practices, as well as setting benchmarks and guidelines. Other aspects include programmes that set political goals and budgets to achieve those goals.

Dialogue Committee for the Furniture sector set up a special vocational training working group.

This working group's first project focused on VET in the sector, the quality of such training in the participating Member States and worker mobility. This project led to the development of close cooperation between (national/local) training bodies within the sector. A further project was devoted to the possibility, afforded by the EU, of setting up so-called 'Sector Skills Councils' (sectoral observatories for monitoring qualification trends). The study conducted as part of this project elicited a great deal of interest on the part of national stakeholders. However, the European social partners did not feel that the situation was ripe for establishing such an institution at European level.

The political goal of further fostering cooperation between national stakeholders at European level and supporting the need to modernise occupations and VET structures through specific activities is still relevant. This gave rise to the idea of the 'Bolster Up' project, developed in conjunction with IG Metall, which submitted the project application. The key aim from the outset was to further develop the occupational profiles in the furniture sector in such a way as to ensure that the vocational training, regardless of the national VET system, provides the qualifications needed by skilled and autonomous workers in order to react to changes in technology, processes and customer relations, etc., and to be able to actively forge their own careers.

Moreover, it was, and still is, the explicit goal of the European social partners in the furniture sector, using the European core occupations as a basis, to take steps towards establishing a common approach to VET that can be implemented at European level. This approach is not intended to harmonise the systems, but instead to achieve and guarantee a certain level of quality, which is essential for Europe in its capacity as a business location and will contribute to the progressive development of vocational training systems. We also believe that this will contribute significantly to the future innovation capability of our sector.

INTRODUCTION ON PROJECT, AIMS AND METHODOLOGY

The IG Metall headquarters, and more specifically the department responsible for Training and Qualifications Policy, is coordinating the content and the technical side of the project, while LimA UG is responsible for its financial and administrative management.

In order to achieve the goals set out in the project application and the handbook, a detailed work plan was established, which is updated on an on-going basis.

So far, the project partners have met on four occasions – in Frankfurt, Brussels, Amsterdam and Warsaw. In between the meetings, work was coordinated by email or telephone. The working language of the project is English.

The project tasks were divided into six different work packages, responsibility for which was shared out between the various partners. It would not be possible to describe all the work in detail here, so we will just briefly present the main activities. This project is directly linked to the discussions that have taken place in recent years regarding the recognition of foreign qualifications, the mobility of skilled workers and demographic and economic developments in Europe. Other stakeholders are running other projects that seek to find practicable solutions to similar issues. In order to support these activities and contribute to their implementation, we have decided to include in this handbook documentation that could really be of use within the framework of these activities. There is no point in trying to reinvent the wheel...

1. Get an overview of the situation at the start of the project.
   All partners produced a national report on the VET situation in their respective countries. This report should include the content of the training based on the national curricula and VET rules and regulations, as well as the different training pathways and the duration of the training, etc. The project has not focused on national education and training systems or a comparison of those systems. Nor has it focused on the oft-discussed issue of input- or output-oriented approaches to education and training. There are already sufficient studies on these topics. The goal

was rather to identify qualifications that can be obtained in the various countries. From this, a guide for interviewing stakeholders from industry (employers, upholsterers, woodworkers) has been developed. The aim of the interviews is to obtain information about the qualification requirements needed by skilled workers who work in the furniture manufacturing and upholstery sectors. In addition, it should be ascertained whether the content of the training is tailored to these requirements and whether there are any new qualifications that are likely to be important in the future.

In order to be able to better assess the national reports, a template containing the relevant qualifications was developed. The Synthesis Report contains a summary of the national reports.

2. The assessment of the national reports highlighted the significant differences between them. The reports contained comprehensive information about the VET programmes, but it was not possible to extract full and comprehensive details of the exact qualification requirements for furniture makers and upholsterers. It was not possible to establish a European core profile on the basis of the reports. A guide was therefore produced for use in interviews with people responsible for developing training content (training regulations, curricula, etc.), including trainers, teachers, representatives of social partners, representatives of training bodies and ministries. This guide lists the qualifications gleaned from the national reports and the interviews with skilled workers and employers, with additional input provided on the basis of the coordinators' knowledge of the relevant sectors, as well as the training paths leading to these qualifications. The guide also addresses issues relating to the impact of a European core occupational profile on the national education and training system and on national education and training content. The guide also takes into account the compatibility of the qualifications with ECVET/EQF standards.

3. The assessment of these interviews revealed a different picture for each of the two occupations concerned. The partners indicated which qualifications could be obtained within their systems and the respective training pathways. This enabled an initial template to be completed, which gave a good overview of the knowledge, skills and competence requirements. A project of this kind cannot afford to enter into

scientific details and describe the ins and outs of all qualifications. It must therefore remain general in nature, e.g. 'use of machinery', which says nothing about the exact type of machinery used or 'materials', and nothing about the exact type of materials used, etc. Details are in fact not needed to be able to produce an initial draft occupational profile. The description of the competences required did reveal, however, that skilled workers who use machines to manufacture their products may also assemble, maintain and operate the machines themselves.

4. United in diversity – how does the European core profile look?

   To describe a European core profile for cabinet maker and upholsterer is a more difficult task than we expected. It was thought that the qualifications of those who produce furniture and upholstery within Europe are almost the same or quite similar because they produce the same products – okay, they look different, but it is all furniture or upholstery. That is what the skilled workers all have in common. We compared and controlled all our documents: it turned out that many qualifications are the same.

   <div align="center">"Core qualifications" really exist!</div>

However, the exercise has also shown that not all countries cover all aspects in their qualifications. This is the case, for example, with furniture design, computer-aided design, mattress manufacturing, which is not performed by upholsterers in some countries, as well as many soft skills, such as economically and environmentally responsible behaviour, the use of foreign technical terms, the division of labour within the corporate hierarchy, or customer relations. The interviews also showed that there are different perceptions of the tasks, decision-making responsibilities and the role of skilled workers within a company, which have an impact on the training undertaken. This is linked to the work processes in the company and the VET goals in the partner countries. Education and training systems across Europe differ in terms of their shape, their goals and their content. They have developed over centuries, have been further expanded and, as part of the culture, politics and economies of the respective countries, have been tailored to their respective requirements. Finding common threads within these differences and defining them is no small challenge!

During our meeting we decided to define only those qualifications as "core qualifications" which are shared by all seven partner countries.

This is our definition. This does not mean that all qualifications which are shared by five or six countries do not belong to a cabinet maker or upholsterer.

The most important point and reason for these differences seems to be where the skilled person will work later on.

If s/he is working in an industrial company with many employees, the workflow is more or less given, the work process is marked through a division of labour and there is no direct contact between (end-) customers and the cabinet maker or upholsterer. The design of the furniture, the quality standard etc. cannot be influenced much by the single worker. S/he has to fulfil her/his duties on a high standard, together with her/his colleagues, responsible for the quality of their own work within the team of all workers. The team leader will give advice.

If s/he is working in a small company (craft sector) or even alone as a craftsperson, the workflow to produce the furniture follows the same technical rules but the person has higher autonomy in the organization of work, there is less division of labour, there is regular contact to the (end-) customer and, the furniture has to be designed to the demands of the customer. It is an individual production of furniture, small series for the customer himself, not to be sold in the Furniture house.

This is the background to most of the differences we noticed. A country which provides the VET for the cabinet maker or upholsterer working within industry has to do this differently from a country which does it more for the small companies. The VET system therefore has different ways: two different professions for furniture maker, different times of education, and different ways of lifelong learning based on initial education.

Our next step was thus to focus on the core qualifications selected for the project and on the qualifications that have been identified, on the basis of consensus, as being present in all the partner countries.

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We divided the core qualifications into units by workflow. These units were defined in such a way as to ensure better alignment with and better implementation of the ECVET system. However, following discussion, it was decided that this was not the right time to address the ECVET system in our project. The final report will set out an opinion on this issue.

In order to ensure a sound foundation for the final versions of both occupational profiles, the description of qualifications were aligned with the EQF.

5. The results of the second round of interviews and the test phase were summarised in the final report.

6. We will publish our final proposal for a European occupational profile for woodworkers/upholsterers in the final report, as the outcome of the conference also needs to be taken into account.

7. It will not be possible to develop European occupational profiles unless there is an agreement on common VET standards. This can only be achieved through consensus at sectoral level in the partner countries and must be supported across the board by all stakeholders involved in vocational training. The Memorandum of Understanding, which is due to be signed by the project partners, will contribute to defining our common goals.

8. Implementation of the results of the project will remain an important task for all partners after the project has been completed. The topics that will be presented and discussed at the conference will be documented in the final report.

9. Finally, let us not forget that this project was not all plain sailing. Particular thanks should therefore be extended to all partners, who, despite the heavy workloads resulting from their routine duties, committed themselves to the additional work generated by the project! Without this commitment, it would not have been possible to achieve what has been achieved.

INTERVIEW GUIDELINES AND MARKING GRID

INTERVIEW GUIDELINES – CABINET MAKER

		CABINET MAKER
Date of the interview:		
Company/Organisation:		
Interview-Partner: Name/first name Function/profession		**No.**
Interviewer:		

Characteristics of the company	
1. Name and place of the company?	
2. Number of employees?	
3. Number of skilled and unskilled workers in the firm?	
4. Number of trainees / apprentices?	
5. What kind of products does the company produce?	
6. Does the company work in the industry (mass production) or in handicrafts (individual products)?	
Characteristics of interviewed person and work routines CABINET MAKER	
You are a qualified cabinet maker …	
7. Please describe the work process in your company?	
8. Which concrete tasks arise within your work process?	
9. Can you make subject-related decisions yourself when working on your tasks? What kind of decisions?	
10. Do you have customer contact /do you conduct customer talks? What do you consider important to do this successfully?	
When completing your tasks ...	
11. Do you know the main regulations regarding health and safety?	
12. Can you apply / use protective devices?	
13. Do you wear protective clothing?	
14. Do you know regulations regarding environmental protection?	
15. Are you able to contribute to	

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environmentally-friendly waste disposal and rational / sustainable use of materials?	
16. Do you plan your own work processes and steps? By yourself or in a team?	
17. Are you responsible for the coordination of work steps / tasks? What do you need to know to do this? What is important to consider?	
18. Do you draw-up technical documents (drawings, lists of materials, etc.)?	
19. Are you able to apply / use technical documents (drawings, lists of materials, etc.)?	
20. Do you use sector- / company-specific computer programmes?	
21. Are you responsible for estimating required materials?	
22. Do you set-up your own workplace (considering ergonomics) and judge transport distances?	
23. Do you work only inside your company or do you also deliver products and assemble furniture at the customer's site?	
24. Are you responsible for planning the assembly at the customer's site?	
25. Which materials do you use in your work? Do you know their specific characteristics? Do you choose materials you use yourself?	
26. Do you work on and process wood, wood materials and other materials manually and with machines?	
27. Do you know different tools? Can you sharpen and maintain them?	
28. Do you know different machinery and equipment? Do you know how to set-up, maintain and use the machines / equipment? Do you know how to identify faults?	
29. Are you responsible for fixing / removing faults? Do you know the regulations for the prevention of accidents when dealing with machines?	
30. Are you able to use computer-operated machinery?	
31. Do you supervise the work process?	
32. Do you supervise the work of others?	
33. Are you responsible for identifying faults and problems in the production process	

and optimising processes? Do you collect and interpret data?	
34. Do you use hauling and transporting equipment?	
35. Do you supervise the entire work process?	
The production of furniture involves a number of individual steps	
36. Do you know different measuring methods?	
37. Do you measure and evaluate measuring results?	
38. Do you produce stencils for the production of furniture?	
39. Do you know different furniture construction kinds? Are you able to produce different constructions?	
40. Do you produce furniture parts with different kinds of wood / material joints?	
41. Do you select different fittings and assemble them?	
42. Do you assemble different parts such as roles, technical elements, fixtures for kitchen furniture, etc.?	
43. Do you construct complete pieces of furniture out of the required elements, fittings and accessories? Are you able to join different pieces of furniture, e.g. wall units?	
44. Do you know different methods and instruments for the treatment and sealing of surfaces?	
45. Do you treat surfaces, e.g. painting?	
46. Do you coat surfaces, e.g. with veneers, slides or laminates?	
47. Do you know the company-specific aims and methods of quality assurance?	
48. Do you check the quality of your work? Are you able to apply quality assurance checks?	
49. Do you control time and materials used and check if customer requirements are followed?	
50. Do you mark products for shipping?	
51. Do you pack products for shipping?	
Assembly at the customer's site, outside the company	
52. Do you check the transport distances and the preconditions for work at the site, e.g. protection of existing furniture, power	

supply for electrical equipment?	
53. Are you responsible for coordinating the assembly with other concerned parties (persons, companies, etc.)?	
54. Do you secure the assembly site and protect tools and machinery?	
55. Do you assemble furniture to existing fittings / in buildings?	
56. Do you know safety regulations for dealing with electricity?	
57. Do you connect electrical equipment with existing connections?	
58. Do you know safety regulations for dealing with water and wastewater?	
59. Do you connect objects and fittings to existing circuits?	
60. Do you conduct checks of density and function?	
61. Do you disassemble existing furniture and transport them?	
Additional	
62. Are there any other tasks that are important in your work? Please specify them!	
63. Which aspects of your work do you consider most important?	
64. What is important for you to know / be able to do in order to do your job successfully?	

Future requirements / trends

What changes / trends do you notice in your job?	
65. With regard to technical equipment that is used?	
66. With regard to work organization?	
67. With regard to new demands on the individual worker (higher level of productiveness, greater standardization, etc.)?	
68. With regard to legal provision (health and safety, environment)?	
69. With regard to different use of raw materials, waste disposal, sustainable production?	
70. With regard to products and customer requirements on products	

71. Do the things you need to know and be able to do change according to these new trends?	
72. Do you need new / different qualifications?	
73. What do you think is important in the future, to do what you do (to be good in the job), for the next generation of employees?	
Currency of qualification and advanced training	
74. Can you change the company you are working for easily with the qualifications you have?	
75. Could you work with your qualifications in other European countries in the same position you work in now?	
76. What is the link between qualification, further training and wages? Are higher wages closely linked to further training?	
77. What further training measures are common in your job? Where do they take place?	
78. Who pays for training (employer or employee, in what circumstances)?	
79. Does your company have a further training / personnel development system in place? What form does it take?	
Other notes:	

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Marking Grid to indicate aspects for the Cabinetmaking profession

Country: …………………………………

N.B. When filling in please use the letter **v** to mark a cell   (don't use **x**)
Compulsory can also mean 'essential', Optional can also mean 'secondary'
Attention: If your country knows several levels of training fill in several **seperate** grids

Knowledge Aspects	Position in Qualification			Learning Path		
	Compul-sory	Optional	NA	Formal	Nonformal/ Lifelong	Courses
the company's structure and responsibilities of other departments (administrative, commercial, technical services)						
documentation procedures						
the company`s data system						
acceptance standards						
technical drawings						
construction of furniture						
design of furniture						
technical regulations						
different basic materials						
manual tools, maintenance						
portable electrical and pneumatic tools						
woodworking machines						
automated machines						
computerized equipment						
different producing procedures						
measuring methods and tools						
wood protection						
fittings						
coatings and manual techniques to apply						
packing material						
economic behaviour						
waste management						
environment protection						
efficient energy use						

health and safety regulations						
storage of materials and furniture						
transport regulations						
properties and proper handling of goods						
Knowledge aspects missing for your country						
Add rows if needed						

Skills aspects	Position in Qualification			Learning Path		
	Compul-sory	Optional	NA	Formal	Nonformal/ Lifelong	Courses
read technical drawings						
look for information						
use the company's ICT systems, standard software and workplace-specific software						
read, understand and fill-in documentation						
design furniture						
comply with health and safety principles and regulations						
comply with security regulations incl. environmental protection and efficient energy use						
select, check, transport and store materials						
deal with materials by hand and by machine						
use and maintain tools and equipment						
use and maintain machines						
take measurements						

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protect wood with special construction						
prepare work piece before coating						
apply fluid and solid coatings with manual tools						
select and mount fittings						
mount electric components						
use automated and computerized equipment						
control the function of movable elements						
repair furniture						
use means of transportation and handling						
pack furniture						
control quality of own work						
assist in implementation of quality assurance methods						
Skills aspects missing for your country						
Add rows if needed						

Professional and behavioural aspects	Position in Qualification			Learning Path		
	Compul-sory	Optional	NA	Formal	Nonformal/ Lifelong	Courses
act competently within the production system (combine knowledge and skills and professional attitude in everyday work)						
understand the logistic process in the plant						
speak idiomatically and						

professionally						
know technical terms in a foreign language						
ensure accuracy and reliability						
take care of citizenship						
recognize different types of waste						
keep to the scheduled maintenance						
take on responsibility for compliance with health and safety regulations						
take on responsibility for compliance with security regulations						
take on responsibility for dealing with environmental regulations						
solve problems						
act within innovation-team						
work in a customer-oriented manner						
cooperate inter-relational (customer-, supplier-contact and cooperation with team and other departments)						
take responsibility for co-workers						
work in a cost and time-effective way						
reflect on possibilities for improving processes						
judge work results, control work process						
use material and machines within the whole process efficiently and effectively						
recognize different types of supporting material						
recognize different types of packing						
take on responsibility for dealing with regulations for sending						

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take on responsibility for compliance with work regulations						
Professional/ Behavioural aspects missing for your country						
Add rows if needed						

INTERVIEW GUIDELINES - UPHOLSTERER

Date of the interview:		**UPHOLSTERER**
Company/Organisation:		
Interview-Partner: Name/first name Function/profession		**No.**
Interviewer:		

Characteristics of the company

1. Name and place of the company?	
2. Number of employees?	
3. Number of skilled and unskilled workers in the firm?	
4. Number of trainees / apprentices?	
5. What kind of products does the company produce?	
6. Does the company work in the industry (mass production) or in handicrafts (individual products)?	

Characteristics of interviewed person and work routines UPHOLSTERER

You are a qualified upholsterer …	
7. Please describe the work process in your company?	
8. Which concrete tasks arise within your work process?	
9. Can you make subject-related decisions yourself when working on your tasks? What kind of decisions?	
10. Do you have customer contact /do you conduct customer talks? What do you consider important to do this successfully?	
When completing your tasks ...	
11. Do you know the main regulations regarding health and safety?	
12. Can you apply / use protective devices?	
13. Do you wear protective clothing?	
14. Do you know regulations regarding environmental protection?	
15. Are you able to contribute to environmentally-friendly waste disposal and rational / sustainable use of materials?	

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16. Do you independently plan your own work processes and steps?	
17. Are you responsible for the coordination of work steps / tasks? What do you need to know to do this? What is important to consider?	
18. Do you draw-up technical documents (drawings, lists of materials, etc.)?	
19. Are you able to apply / use technical documents (drawings, lists of materials, etc.)?	
20. Do you use sector- / company-specific computer programmes?	
21. Which materials do you use in your work? Do you know their specific characteristics? Do you choose materials you use yourself?	
22. Do you know different tools? Can you sharpen and maintain them?	
23. Do you know different machinery and equipment? Do you know how to set-up, maintain and use the machines / equipment? Do you know how to identify faults?	
24. Are you responsible for fixing / removing faults? Do you know the regulations for the prevention of accidents when dealing with machines?	
25. Are you able to use computer-operated machinery?	
26. Do you supervise the work process?	
27. Do you supervise the work of others?	
The production of upholstered furniture involves a number of individual steps	
28. Do you prepare padding and covering material?	
29. Do you produce timber joints?	
30. Do you process wood and wood materials?	
31. Do you join metal parts?	
32. Do you process metal?	
33. Do you process plastics?	
34. Do you know methods and instruments for the treatment of surfaces?	
35. Do you treat the surfaces of upholstered frames?	
36. Do you produce stencils for cutting covering material?	
37. Are you responsible for estimating required materials?	
38. Do you hand-cut or punch out covering material?	
39. Are you responsible for marking covering materials for further processing?	

40. Do you know upholstering techniques?	
41. Are you able to apply different upholstering techniques?	
42. Do you produce the form out of different form parts (e.g. foam)?	
43. Do you produce mattresses?	
44. Do you know different kinds of covering materials?	
45. Do you perform sowing, by hand or machine?	
46. Are you able to upholster back or sitting cushions?	
47. Can you design upholstered areas (e.g. through darts)?	
48. Do you decorate upholstered furniture (e.g. through decorative pins)?	
49. Do you assemble accessories such as roles, fittings, technical elements, speakers?	
50. Do you know the company-specific aims and methods of quality assurance?	
51. Do you check the quality of your work? Are you able to apply quality assurance checks?	
52. Are you responsible for marking products for shipping?	
53. Do you mark products for shipping?	
54. Do you pack products for shipping	
Additional	
55. Are there any other tasks that are important in your work? Please specify them!	
56. Which aspects of your work do you consider most important?	
57. What is important for you to know / be able to do in order to do your job successfully?	
Future requirements / trends	
What changes / trends do you notice in your job?	
58. With regard to technical equipment that is used?	
59. With regard to work organization?	
60. With regard to new demands on the individual worker (higher level of productiveness, greater standardization, etc.)?	
61. With regard to legal provision (health and safety, environment)?	
62. With regard to different use of raw materials, waste disposal, sustainable production?	
63. With regard to products and customer requirements on products	

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64. Do the things you need to know and be able to do change according to these new trends?	
65. Do you need new / different qualifications?	
66. What do you think is important in the future, to do what you do (to be good in the job), for the next generation of employees?	

Currency of qualification and advanced training	
67. Can you change the company you are working for easily with the qualifications you have?	
68. Could you work with your qualifications in other European countries in the same position you work in now?	
69. What is the link between qualification, further training and wages? Are higher wages closely linked to further training?	
70. What further training measures are common in your job? Where do they take place?	
71. Who pays for training (employer or employee, in what circumstances)?	
72. Does your company have a further training / personnel development system in place? What form does it take?	
Other notes:	

Marking Grid to indicate aspects for the Upholsterer
Country: ....

When filling in please use the letter v to mark a cell   (don't use **x**)
Compulsory can also mean Essential, Optional can also mean Secondary
Attention: If your country knows several levels of training fill in several **seperate** grids

Knowledge Aspects	Position in Qualification			Learning Path		
	Compul-sory	Optional	NA	Formal	Nonformal/ Lifelong	Courses
the company's structure and responsibilities of other departments (admin, commercial, technical services)						
documentation procedures						
the company's data system						
acceptance standards						
technical drawings						
construction of upholstery and mattresses						
technical regulations						
different basic materials						
manual tools, maintenance						
portable electrical and pneumatic tools						
automated machines						
computerized equipment						
different producing procedures						
measuring methods and tools						
fittings						
packing material						
economic behaviour						
waste management						
environment protection						
efficient energy use						
health and safety regulations						
storage of materials and upholstery						
transport regulations						
properties and proper						

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handling of goods					
the company's structure and responsibilities of other departments (admin, commercial, technical services)					
documentation procedures					
the company's data system					
acceptance standards					
technical drawings					
construction of upholstery and mattresses					
technical regulations					
different basic materials					
manual tools, maintenance					
portable electrical and pneumatic tools					

Skills aspects	Position in Qualification			Learning Path		
	Compul-sory	Optional	NA	Formal	Nonformal/ Lifelong	Courses
read technical drawings						
look for information						
use the company's ICT system, standard software and workplace-specific software						
read, understand and fill in documentation						
comply with health and safety principles and regulations						
comply with security regulations incl. environmental protection and efficient energy use						
select, check, transport and store materials						
deal with materials by hand and by machine						
use and maintain tools and equipment						

use and maintain machines						
take measurements						
cut materials to size						
sew covers						
design cover patterns						
prepare pad parts						
upholster parts						
select and mount fittings						
mount electric components						
use automated and computerized equipment						
control the function of movable elements						
repair upholstery						
use means of transportation and handling						
pack upholstery						
control quality of own work						
Skills aspects missing for your country						
Add rows if needed						
Professional and behavioural aspects	Position in Qualification			Learning Path		
	Compulsory	Optional	NA	Formal	Nonformal/ Lifelong	Courses
act competently within the production system (combine knowledge and skills and professional attitude in everyday work)						
understand the logistic process in the plant						
speak idiomatically and professionally						

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know technical terms in a foreign language						
ensure accuracy and reliability						
take care of citizenship						
recognize different types of waste						
keep to the scheduled maintenance						
take on responsibility for compliance with health and safety regulations						
take on responsibility for compliance with security regulations						
take on responsibility for dealing with environmental regulations						
solve problems						
act within innovation-team						
work in a customer-oriented manner						
cooperate inter-relational (customer-, supplier-contact and cooperation with team and other departments)						
take responsibility for co-workers						
work in a cost and time-effective way						
reflect on possibilities for improving processes						
judge work results, control work process						
use material and machines within the whole process efficiently and effectively						
recognize different types of supporting material						
recognize different types of packing						
take on responsibility for dealing with regulations for sending						

take on responsibility for compliance with work regulations					
Professional/ Behavioural aspects missing for your country					
Add rows if needed					

SYNTHESIS REPORT

Introduction

The Cross-national Synthesis Report for Furniture-making and Upholstering aims to:

- Provide a comprehensive account of the qualifications in Furniture-making and Upholstering in seven EU countries: Belgium, Bulgaria, Denmark, Germany, Netherlands, Poland and Romania. Table 1 provides this information in summary form.
- Provide an account of the similarities and differences between qualifications in the seven countries. Table 2 provides the information in summary form.
- Indicate the prospects for comparison of qualifications and the construction of core qualification profiles within the context of the European Qualification Framework (EQF).

The report has been constructed from seven national reports from each of the partner countries. On the basis of the information provided in these reports, a grid of abilities and activities covered by each qualification was built up. This grid was constructed on the basis of previous work on situating sectoral qualifications (EQF). These include work on conceptual and linguistic challenges in implementing the EQF (Brockmann et al, 2011); a proposed sectoral framework for the European Construction Sector (Garstka and Syben, 2009) and a comparative study of Bricklaying qualifications in eight countries using a classification derived from Brockmann et al and Garstka and Syben (Brockmann et al 2010). This synthesis report uses this methodology to provide a comprehensive mapping of the Furniture-making and Upholstering Sector.

Table 1 *Elements for Cabinet making and Upholstering* provides a comprehensive tabular account of these qualifications for seven countries. It is a more fine-grained framework than that adopted by the EQF, which aims to identify learning outcomes and has a tripartite distinction between *knowledge, skills* and *competence* to do so. In Table 1, on the other hand, distinctions are made between know-*how* (occupational skills, transversal abilities), and *knowledge* (General Education, Occupational Knowledge). By 'occupational skills' we

mean abilities to perform particular tasks, such as *Reading technical drawings, Working with automated and computerised equipment* and *Applying protective and decorative coatings.* Transversal abilities are abilities for which more different skills may be relevant in different contexts, but which are concerned with maintaining the production cycle from planning to evaluation, such as *Maintaining quality in production process, Communicating and co-operating with colleagues in the production process* and *Maintaining a healthy and safe working environment*. The transversal abilities may be combined to provide the ability to manage the production cycle from planning a product to evaluating quality. Another way of looking at this is to see transversal abilities as taking the place of competence in the original EQF framework (third column). They relate, not just to a position within a managerial hierarchy, but to the ability of workers to manage their own work, to co-operate and co-ordinate with fellow workers and to engage in project management, such as controlling the whole cycle of production. In some of the countries in the study this is the case, as can be seen from Table 1. These abilities appear to be of increasing importance in the light of technological changes in the sector.

> "Whereas furniture has traditionally relied on specialised craftsmanship and technical skills, workers increasingly need to combine and integrate a heterogeneous set of skills, drawing on, amongst others, creative skills, marketing and project management skills in order to deal with issues such as flexibility, early problem detection, quality, and client orientation." (Gijsbers et al, p.22).

The Knowledge category is also subdivided to take better account of the content of qualifications. General Education is the continuing process of individual and civic development that takes place alongside the development of technical proficiency. Examples include *Proficiency in the mother tongue* and *Learning a foreign language*. *Participation in Sport* is also included within this category. Continuing general education is an important feature of all the countries' qualifications included in this study, albeit with differing degrees of importance. Occupational Knowledge refers to the systematic knowledge which underpins action in the workplace (skills and transversal abilities) and which is meant to be applied in action. It also includes knowledge which helps the employee better understand the context of furniture production and upholstering. Examples include: *Materials for packaging for furniture/upholstered products* and *Economics.*

It is important to note that, although we have classified these different attributes separately, qualifications in some countries assume that they are deployed in an integrated way. In this way occupational knowledge is integrated both into occupational skills and transversal abilities in extended sequences of independent action in which the worker is expected to show a high degree of independence of action and judgement. Very often this will vary according to the level of the qualification. Table 1 was constructed through an iterative process of examining the national reports in the first instance, aggregating the results and then twice cross-checking with the national partners for accuracy and comprehensiveness. It should be noted that the layout of the grid and the conceptual distinctions that underlie it appear to be well-understood by the partners and form a useful lens through which to view the qualifications.

This information, together with the contextual information found in the national reports enabled us to construct a basis for 'at a glance' comparison of the qualifications available in each of the seven countries in the study, and this is to be found in Table 2. Table 2 suggests considerable convergence between the qualifications in all seven countries, albeit with considerable difference in the detail of the qualifications, as can be seen through close inspection of Table 1. Two major points of divergence stand out however in the comparison of VET in the seven countries. The first is that in five of them the predominant mode is that the location is a vocational school accompanied by structured workplace experience. The Netherlands and Belgium–Flanders constitute a partial exception to this pattern, as they combine school and work-based approaches to qualification, and Germany a major exception through the predominant use of the dual system of apprenticeship in that country. The Netherlands and Belgium also make considerable use of dual apprenticeship, which involves the learner being a worker within the firm, who then also receives instruction in a vocational college for about one day per week.

The other point of divergence relates to the level of social partnership involved in the governance of the VET and the qualification, ranging from a comprehensive model from workplace to the level of the region, sector and the State in the case of Germany and sector and the State in the Netherlands, to a minimal involvement in the case of Poland, although it should be noted that in that country there is legal provision for one worker member on the management board for firms of greater than 500 employees (Conchon 2013). Some other countries, such as Belgium, Bulgaria and Romania have no regulations for social partnership

at board level, but do have some provision at the national/regional/sectoral level. Finally it should be noted that although the predominant length of programme leading to qualification is three years leading to a qualification at approximately EQF level 3, there are instances of shorter programmes and, in some cases, a hierarchy of programmes ranging from level 2 to level 4 (the Netherlands being an example).

Crossnational summary:

This section provides a commentary on the comprehensive grid shown in Table 1 (Annexe 1). The grid follows the three column EQF design of: Knowledge, Skills and Competence, but is refined to take account of the needs of the sector. Thus *Knowledge* is subdivided into General and Occupational Knowledge; *Skills* are task-related forms of know-how while *Transversal Abilities* cover competence. They include articulated competence which forms project management abilities, as well as more specific ones and thus characterise the abilities needed to manage oneself and work with others in the production cycle. We will comment on convergences and divergences in the seven countries studied.

Knowledge: General Education

General Education is primarily concerned with the continuing individual and civic development of those entering the sector. All qualifications in both branches in all countries pay a considerable attention to General Education, although this attention is more limited in the Polish case. Variation can primarily be found in the areas of a] a foreign language and b] sport. It should be noted that, although we have classified learning a foreign language within General Education, it clearly has occupational implications, for example for workers who think of migrating or who have to work with foreign-based customers.

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Knowledge: Occupational

Occupational Knowledge concerns the declarative knowledge (as opposed to know-how) that is necessary to practise the occupation. It consists of both systematic (theory-based) and non-systematic (usually locally-based) knowledge. It is noteworthy that here there is also considerable convergence between the seven countries in the project. The notable exception is the Danish qualification, which makes optional a range of elements which other qualifications count as compulsory: economics, entrepreneurship, market conditions for the product (for Belgium and Poland as well). Poland has also a more limited offer in terms of Occupational Knowledge but not so much so as Denmark. Note again the tiered nature of the Romanian system where Occupational Knowledge becomes more important at the higher level.

Occupational Skills

There is a very wide range of Occupational Skills in evidence across the seven countries in the study. However, relatively few such skills are shared across all the countries. These include: *reading technical drawings, working with manual tools and with automated and/or computerised equipment*. Beyond this, there is a large measure of commonality, the notable exception being Poland, which has a much narrower range of occupational skills than all the other seven countries. This pattern is repeated in the other categories and probably reflects the fact that the basic Polish qualification is predominantly school-based, with 4 to 6 weeks work placement per year.

Notable areas where skills are optional include: *Producing lattice furniture* (Denmark, the Netherlands, Poland) and *Producing doors (from solid wood and/or wood-based materials)* (the Netherlands, Poland), *Wood Carving* (all bar Romania compulsory), *Wood Turning* (all bar Germany - no option available and Romania compulsory). Upholstering also includes a wide range of optional elements in Bulgaria and Poland. These include *Dis-assembling, Repairing, Interior decoration and upholstering* and *Making detachable upholstery products*.

Generally speaking, there is a considerable degree of convergence in the covering of occupational skills, but one should note also the narrowness of the Polish qualification on

the one hand and the tiered nature of the Romanian one, which produces variations between levels 3 and 4 (Romanian NQF classification).

Transversal Abilities

Transversal Abilities refer to forms of know-how which can employ different skills in different contexts. They are important, both in the management of the product cycle and in employer independence of action in the workplace. There is a marked degree of uniformity in the specification of transversal abilities in the partner countries. Thus, there is a concern with management of the product cycle and with self-management and co-operation. The development of these abilities does seem to be consonant with research on future trends within the sector, which places an increasing premium on these abilities in the context of increasingly computerised manufacturing processes. The exceptions that should be remarked on include Poland and Romania, where the lower level of their tiered system makes some of the Transversal Abilities optional. Generally speaking, the specification of Transversal Abilities is a strong signal of the ability of the worker to operate independently, with relatively little close supervision and to manage the product cycle.

Knowledge and Know-how: Broad Curriculum or not

There is a high level of convergence in curricula between six of the seven countries in both occupational and general knowledge. The concern appears to be to give workers in the sector a good grounding: in the underpinning knowledge necessary to undertake the occupation; ability to understand the product cycle; to manage self; and to work effectively with others. The curriculum also includes a fairly wide range of occupational skills. There is some uneven development in terms of knowledge of the economics and market conditions of the occupation. In view of the rapid technological change in the sector, this may be an area that merits further attention.

Similarities and differences in the VET systems for furniture-making and upholstering in the seven partner countries.

Table 1: Elements for Qualifications in Cabinet Making and Upholstery

Legend:
- NO indicates that the element is not compulsory
- Yellow = compulsory
- Turquoise = optional

Know-How (Occupational skills)	Belgium Compulsory	Belgium Optional	Bulgaria Compulsory	Bulgaria Optional	Denmark Compulsory	Denmark Optional	Germany Compulsory	Germany Optional	Netherlands Compulsory	Netherlands Optional	Poland Compulsory	Poland Optional	Romania Compulsory	Romania Optional
Cabinet Maker/Upholsterer (all)														
Reading technical drawings	YES		YES		YES		YES		YES		YES		YES	
Preparing technical drawings	YES		YES		YES		YES		YES		NO		YES	
Working with computer assisted design	YES		YES		YES		YES Craft sector only		YES		NO		YES Level 4	YES Level 3
Working with manual tools	YES		YES		YES		YES		YES		YES		YES	
Working with portable electrical and pneumatic tools	YES		YES		YES		YES		YES		NO	YES	YES	
Working with automated and computerised equipment	YES		YES		YES		YES		YES		YES		YES Automated Level 2 / YES Computerised Level 3	
Cabinet Maker / Upholsterer (all)														
Producing cabinet furniture / Producing upholstered products	YES		YES		YES		YES		YES		YES		YES	
Cutting upholstery material	YES		YES		YES		YES		YES		NO		YES	
Stitching upholstery material	YES		YES		YES		YES		YES		NO		YES	
Stuffing upholstered products	YES		YES			YES	YES		YES		NO		YES	
Producing lattice furniture	NO		YES		NO		YES		NO	YES	NO	YES	YES Level 3	
Producing siding, sill plates, cornices	NO		YES		YES		YES		NO	YES	NO	NO		

Know-How / Occupational skills	Belgium Compulsory	Belgium Optional	Bulgaria Compulsory	Bulgaria Optional	Denmark Compulsory	Denmark Optional	Germany Compulsory	Germany Optional	Netherlands Compulsory	Netherlands Optional	Poland Compulsory	Poland Optional	Romania Compulsory	Romania Optional
Producing doors (from solid wood and/or wood-based materials)	YES		YES		YES		YES		NO	YES	NO	YES	YES Level 3	
Producing windows	NO		YES		YES		YES		NO	YES	NO	YES	YES Level 3	
Producing frames for seating furniture (chairs, seats and sofas)	YES		YES		NO	YES	YES		YES		YES		YES	
Producing tables, table tops and chairs/seating furniture	YES		YES		YES		YES		YES		YES		YES	
Applying protective and decorative coatings	YES		YES		YES		YES		YES		YES		YES	
Wood carving	NO	YES	NO	YES	NO	YES	NO		NO	YES	NO	YES	YES	
Wood turning	NO	YES	NO	YES	NO	YES	NO		NO	YES	NO	YES	YES	YES
Dis-assembling upholstered furniture	YES		NO		YES		NO	YES	YES		YES		NO	
Re-upholstery (restoring upholstery) of products	YES		NO	YES	YES		NO		YES		NO		NO	YES
Producing packaging for furniture	YES		YES		YES		NO		YES		NO	YES	YES	
Mounting and packaging of furniture and upholstered products	YES		NO	YES	YES		YES		YES		YES		YES	

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Know-How	Cabinet Maker/ Upholsterer	Cabinet Maker	Upholsterer	Belgium Compul-sory	Belgium Optional	Bulgaria Compul-sory	Bulgaria Optional	Denmark Compul-sory	Denmark Optional	Germany Compul-sory	Germany Optional	Netherlands Compul-sory	Netherlands Optional	Poland Compul-sory	Poland Optional	Romania Compul-sory	Romania Optional
Occupational skills																	
		Repairing furniture	Repairing upholstery products	YES		YES		YES		YES		YES		YES		NO	YES
			Artificial drying of lumber	NO	YES	YES		YES		NO		NO		NO		YES	
			Decoration and upholstering of interiors	NO		NO	YES	YES		NO		NO		YES		YES	
			Making of detachable upholstery products	YES		NO	YES	YES		YES		YES		YES		YES	
Transversal Abilities																	
	Planning and controlling product cycle			YES		YES		YES		YES		YES		NO	YES	YES	
	Designing (sketching) and costing product			YES		YES		YES		YES Craft sector		YES		NO	YES	YES	
	Innovating and developing new models			YES		NO		YES		YES Upholsterer		YES		YES		NO	YES depending upon trainers
	Maintaining quality in production process			YES		YES		YES		YES		YES		NO	YES	YES	
	Ordering, assessing, preparing and maintaining materials			YES		YES		NO	YES	YES		YES		YES		YES	
	Applying cycle of furniture production	Applying cycle of production of upholstered products	YES		YES		YES		YES		YES		NO	YES	YES		
	Maintaining a healthy and safe working environment			YES		NO		YES		YES		YES		YES		YES	

Transversal Abilities	Belgium Compulsory	Belgium Optional	Bulgaria Compulsory	Bulgaria Optional	Denmark Compulsory	Denmark Optional	Germany Compulsory	Germany Optional	Netherlands Compulsory	Netherlands Optional	Poland Compulsory	Poland Optional	Romania Compulsory	Romania Optional
all														
Using tools and machinery safely	YES		YES		YES		YES		YES		YES		YES	
Assuring quality of finished product	YES		YES		YES		YES		YES		NO	YES	YES	
Communicating and co-operating with colleagues in the production process	YES		YES		YES		YES		YES		YES		YES	
Communicating in a simple form in a foreign language with suppliers and/or customers	YES		YES		YES		YES		YES		NO	YES	YES	
Assuming responsibility within the production process	YES		YES		YES		YES		YES		YES		YES	
Assuming responsibility for enhancing occupational skills	YES		YES		YES		YES		YES		YES		NO	YES
Dealing with waste	YES		YES		YES		YES		YES		YES		YES Level 3	YES Level 2
Communicating with management	YES		YES		YES		YES		YES		YES		YES Level 3	YES Level 2
Communicating with customers	YES		NO		NO		YES Cabinet maker		YES		NO	YES	YES Level 3	YES Level 2
Problem solving	YES		NO		YES		YES		YES		NO	YES	NO	YES Level 3

Lifelong Learning Programme

Knowledge	Cabinet Maker/ Upholsterer	Cabinet Maker	Upholsterer	Belgium		Bulgaria		Denmark		Germany		Netherlands		Poland		Romania	
				Compul-sory	Optional	Compul-sory	Optional	Compul-Isory	Optional	Compul-sory	Optional	Compul-sory	Optional	Compul-sory	Optional	Compul-sory	Optional
General education																	
	Mother tongue			YES		YES		YES		YES		YES		YES		YES	
	Foreign language 1			NO	YES	YES		YES		YES		YES English		NO	YES	YES	
	Foreign language 2			NO		YES		NO		NO		NO		NO	YES	NO	
	Sciences			YES		YES		NO		NO		NO		YES		YES	
	Maths			YES		YES		YES		YES		YES		YES		YES	
	ICT			YES		YES		NO		YES		YES		NO	YES	YES	
	Citizenship			NO		YES		YES		YES		YES		YES	YES	YES	
	Social Sciences			NO				NO		NO				NO			
	Natural Sciences			NO		YES		NO		NO		NO		YES		YES	
	Environmental protection			YES		YES		NO		YES		YES		YES		NO	
	Sport			NO	YES	YES		YES		YES		NO	YES	NO	YES	YES	
Occupational Knowledge																	
all	Cycle of furniture production	Cycle of production of upholstered products	YES		YES		YES		YES		YES		YES		YES		
all	Construction and assembly principles for furniture making	Construction and assembly principles for upholstered products	YES		YES		YES		YES		YES		NO	YES	YES		
all	Operational principles for specialised machinery for furniture making	Operational principles for specialised machinery for upholstery	YES		YES		YES		YES		YES		YES		YES		
all	Materials for packaging for furniture/ upholstered products			YES				YES		YES		YES		YES		YES	
all	Materials for production for furniture	Materials for production for upholstery	YES		YES		YES		YES		YES		YES		YES		

In this section we examine the similarities and differences between the VET systems in each of the seven countries in the study. It can readily be seen that there is a high degree of convergence in the general approach taken in each country, although there are differences in detail in individual national qualifications, which are more apparent when one examines Table 1 above. We note the convergence amongst the seven in terms of: a broad curriculum in both occupations; the presence of continuing civic and general education; and an emphasis on transversal abilities as well as skills. Indeed these abilities may well assume increasing importance in the future.

There are two main areas of divergence. One of these concerns the predominance of school- or work-based routes. Poland, Romania and Bulgaria have a predominantly school-based VET route. Belgium-Flanders and the Netherlands have a significant proportion in both school and work-based routes, while Germany and Denmark rely mainly on a work-based VET route. The other concerns the level of trade union involvement in the design and administration of the qualifications, which is a proxy indicator for social partnership as the mode of operation in trade union involvement is to work with government, awarding bodies, regional authorities (where relevant) and employer associations to design and deliver the qualifications. We note a high level of trade union involvement in Belgium-Flanders, Denmark, Germany and the Netherlands, but a low level in Bulgaria, Poland and Romania. It is also worth noting that Romania and the Netherlands (to a lesser extent), have a tiered system of qualification where a comprehensive qualification only fully appears at level 3 or even at level 4 in the case of Romania.

It is also noteworthy that all those countries that have a significant VET work-based route (including those with mixed systems) also have high trade union involvement in VET. It is, however, worth noting that the three countries classified as 'low level' in respect of trade union involvement do nevertheless have trade union involvement in the qualification to some degree. In Bulgaria and Romania for example there is some involvement at the local and sectoral levels. In Poland one may assume that trade unions have some involvement in larger firms due to their having a seat on the management board of the firm, although we have no information as to whether this has an impact on the design and management of qualifications in the sector.

Table 2: At a glance comparison of VET for cabinet makers and upholsterers

	Broad Curriculum Cabinet maker	Broad Curriculum Upholsterer	General and Civic Education	Transversal Abilities	Primarily School-based	Primarily Work-based	Trade union Involvement
Belgium - Flanders	√	√	√	√	1	2	High level 3
Bulgaria	√	√	√	√	√		Low level
Denmark	√	√	√	√		√	High level
Germany	√	√	√	√		√	High level
Netherlands	√	√	√	√	4	5	High level
Poland	√	√	√	√	√		Low level
Romania	√	√	√	√	√	√6	Low level

1. the school-based pathway (*BSO – beroepssecundair onderwijs*)

2. the work-based pathway (*DBSO – deeltijds beroepssecundair onderwijs* and *leertijd)*, which would be more readily comparable with an apprenticeship

3. the expression 'high level' implies that trade unions are involved in the design and delivery of VET at national, sectoral and local level – this is not the case with the expression 'low level'

4. the school-based pathway (*BOL – beroepsopleidende leerweg*)

5. the work-based pathway (*BBL - beroepsbegleidende leerweg*), which would be more readily comparable with an apprenticeship

6. if the apprenticeship is carried out under an Apprenticeship Agreement according to the Apprenticeship Law

Table 2 thus suggests a tentative grouping into two sets of countries in respect of VET.[3] Group 1 (Belgium, Denmark, Germany, the Netherlands) is characterised by significant work-based routes and a high level of social partnership. In the Netherlands, both school- and work-based routes lead to the same qualification. Group 2 (Poland, Bulgaria, Romania) is characterised by predominantly school-based routes and relatively low (but by no means non-existent) levels of social partnership It should be emphasised that these differences

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[3] See *Apprenticeship supply in the Member States of the European Union, pages pp 143-149.*

exist against a background of a common approach in respect of the curriculum, general and civic education and the importance of transversal abilities. The prospects for the development of a Zone of Mutual Trust (ZMT – Coles and Oates 2004) are, therefore, relatively high for Furniture-making and Upholstering among these seven countries, particularly if greater uniformity can be achieved in terms of length of study and the impact of social partnership on curriculum and qualification design.

There is, however, one area of divergence that should be mentioned, which has the potential to impede mutual recognition of qualifications. This is the fact that in some countries (eg the Netherlands), the qualifications are offered at different NQF levels, and therefore only some of the qualifications will correspond with those in other partner countries. Clarity will be needed on at which level the core qualification should be based.

Key Points of EQF Design and their Relevance to this Project

Adopted by the European Parliament in 2008, the European Qualifications Framework (EQF) is designed to promote a common terminology and a common reference point for the comparison of qualifications of the member countries of the European Union (EU) (Méhaut and Winch 2011). It can be seen as part of the general tendency, supported by international organisations (notably the OECD), to develop such frameworks at national and international level. The EQF appears as a comprehensive framework, aiming at transcending the boundaries between vocational and general education and thus consonant with one of the aims of European policy. The EQF is also fully engaged with the European policy of lifelong vocational and professional education, covering without distinction qualifications in both initial and continuing education. However it goes further in - following European terminology and Recommendations - aiming at qualifications which recognise learning acquired through 'formal', 'informal' and 'non formal' processes. In order to do this, but also on account of the failure of previous European attempts to elaborate a system of equivalence between qualifications, it is founded on learning outcomes which are to be seen as 'outputs' independent of the processes which have led to them. It thereby apparently breaks with the 'input-output' approach (number of years of study, number of hours of VET (inputs) and, for example, an exam pass mark signifying a level of knowledge (outputs)). However, closer inspection of what is actually meant by 'learning outcomes' suggests that the break is not as radical as it might at first sight appear. This is confirmed by a recent review of progress

towards the development of National Qualification Frameworks (NQFs) undertaken by CEDEDFOP, a specialised agency, the European Centre for the Development of Vocational Training (CEDEFOP 2013). In effect, *standards*, that is waymarks for achievement on a curriculum, can now count as learning outcomes, as well as the statements of task ability that characterise the more radical forms of outcomes-based qualification, such as the National Vocational Qualifications in England (see Coles 2007 for an explanation of the distinction and Brockmann, Clarke and Winch (2008) for a critique).

This is quite important for this study as it suggests that curricular convergence should make it possible to arrive at some measure of common learning outcomes on these programmes. The evidence displayed in Table 1 indicates that this is possible.

The design features of the EQF are intended to achieve two explicit objectives.

1. 'Horizontal' comparability of qualification levels between countries, supposedly necessary in the context of learner and labour market mobility in Europe. For the purposes of *Bolster-up* this is a very important aspect of the comparison of qualifications, because if there is a failure to maintain trust in the assigned level that a given country confers on a qualification, then comparison will be difficult, if not impossible. There is anecdotal evidence that the referencing process at the national level may have been uneven in quality and that EU countries may have engaged in 'competitive inflation' to avoid their qualifications appearing at a lower level than those of others. We recommend a sector-based referencing process for the Furniture-making and Upholstering sector, which is based on mutual agreement and respect for a sectoral referencing process that all countries can trust.

2. 'Vertical' comparability, more concerned with intra-national considerations in the context of life-long VET and vertical pathways from one qualification to another (as in the French or Dutch systems). It is considering the extent to which each individual qualification is 'permeable' that is, whether it contains sufficient substance so that passing it enables the qualification holder to move to the next level of qualification. Qualifications that have little or no general educational component are unlikely to have a high degree of permeability, as will qualifications that presuppose a very short period of study.

A third objective of the EQF, however, largely implicit, is that of position 'on the labour market', being presented as an instrument for the mobility of workers, facilitating comparison of qualifications and vocational abilities. 'Competence' is thereby formulated as 'autonomy' which refers back to both autonomy in learning and autonomy in the workplace. This feature of the EQF is particularly important for the purposes of this report, as its success will depend on embedding the framework in different economic sectors in such a way that it can be used by employers and workers, as well as by educators. *Bolster-up* can be seen as an attempt to do so within the furniture industry. The emphasis on transversal abilities suggests that there is a common understanding of the significance and role of relative autonomy within the workplace within the sector as well as in making provision for progression within education (although the picture here is more varied).

Scope

One major omission in the original EQF design was the specification of the particular knowledge and abilities that a qualification guarantees. The specification we call the 'scope' of a qualification or part of a qualification. For the EQF to have any prospect of being adopted for labour market purposes, scope specifications will need to be built in to sectoral qualification frameworks. We have carried this out for the Furniture sector through the detailed specification of knowledge and abilities needed, and the scope of the qualifications is set out in Table 1 country by country should enable ease of comparison. Specification of scope is a prerequisite for comparison. It should be clear thought that for scope classification to work, like should be compared with like, so that two or more activities or items that fall under the same description really are the same. The National Reports in this project do not provide this level of information, so more detailed comparative work will need to involve a closer inspection of the curricula. This information is available for some but not all of the partner countries.

How the EQF and Sectoral Qualifications Frameworks work

EQF does not directly certify competences, as its purpose is to act as an indirect comparator for qualifications in different countries. If certificated achievements can be specified in an NQF in terms of learning outcomes, then it should be possible to lay two or more qualifications alongside each other on the EQF grid to determine their degree of equivalence. If national qualifications are themselves based on learning outcomes and conform to the structure of the EQF, comparison becomes all the easier.

It is now much clearer that, although the EQF as originally conceived as a 'transformative' qualification framework (Allais, Raafe and Young 2009), which took a radical view of learning outcomes completely divorced from content of pedagogical process. The recent CEDEFOP report on the implementation of NQFs in the EU makes it clear that a more flexible approach to learning outcomes is now being adopted (CEDEFOP 2012), which pays due regard to inputs such as curriculum and pedagogy and does not try to specify learning outcomes without any regard to processes of learning and teaching. Nevertheless, partner countries will all need to understand what they exactly mean by 'learning outcomes' when comparing qualifications.

Increasingly both NQFs and the EQF itself are being referred to as an instrument of qualification transparency, or as a 'transparency tool' which allows for ease and accuracy of comparison of one or more qualifications. The EQF has shifted from a phase in which it was used as a means of encouraging countries to develop outcomes-based NQFs (in the strong sense of 'learning outcome') to one which is more concerned with description and comparison of qualifications. The practical consequence of this shift for this project is that there is no need to modify the design of the qualifications compared, as learning outcomes terminology can be used for standards-based qualifications. However, for the purpose of ensuring transparency via the EQF, sufficient curricular detail and an accurate specification of EQF level are required. This involves the development of Sector Qualification Frameworks (SQFs), in which the necessary detail for describing occupations in particular sectors is set out within the overall categories of the EQF. The former requirement should be met through the information provided in this report which could form the basis for an SQF for Furniture making and Upholstering. The issue of levelling is more difficult, since there is plenty of evidence (EU 2013) that it will be difficult to reconcile the referencing exercises of the

various EU countries at the more formal, national level. As with the case of Bricklaying (Brockmann et al 2010), referencing will need to be carried out at the sectoral level in order to ensure mutual trust amongst the various national social partners.

The relationship between EQF and ECVET.

The EQF and ECVET are conceived to be complementary tools. EQF provides transparency of comparison between qualifications, while ECVET provides a means of ensuring portability of part-qualifications from one country to another. Like EQF, ECVET is based on a learning outcomes approach, of the softer sort described above. The aim is to provide credit for prior learning as the means of ensuring portability. However, ECVET has had to proceed cautiously, for two reasons. First of all, the aim to specify credit through a purely outcomes-based approach (eg EU 2006) has been adapted so that it is capable of taking into account amount of time/effort required to reach a certain standard. Thus it is possible to assume a rough equivalence of standards achieved in two qualifications based on an equivalence of study or practice time taken.

Second, and potentially more problematically, the idea of tying credit to quantification through 'credit points' has proved to be more difficult and less popular than was originally envisaged (CEDEFOP 2013). This means that it is possible to develop ways of allocating credit for part-qualifications that do not entail the explicit awarding of credit points. Sectors may wish to develop their own systems of credit award through mutual negotiation and agreement. There is no obstacle to their using a credit point-based system should they choose to do so, but no obligation either. This will have an impact on Work Package 4 of this project, which currently talks of awarding credit, without mentioning credit points. Our suggestion is that further work on explicit and implicit study time would need to be undertaken before credit points could be awarded with any confidence. It may, however, not be necessary to do this if other ways of awarding credit can be devised, for example by establishing notional equivalence between individual part-qualifications.

A common framework for furniture making within EQF and ECVET?

We conclude this report with some brief comments on the issue of core qualifications and a common framework for comparison.

The first point is that a softening of the original EQF idea of a learning outcome makes it much easier for the sector to develop core profiles based on learning outcomes derived from national curricula, provided all the partner countries understand what each means by a 'learning outcome', for example as a standard indicating the amount of knowledge, ability and competence arising from following a curriculum, with provisions made for accrediting non-formal and informal learning. Our view is that the study shows that 'learning outcome' corresponds to something like a standard in the sense outlined above, but partners will need to check that this is indeed the case.

The second point is that the information displayed in Table 1 can form the basis for core occupational profiles so that the minimum requirements for a qualified worker (at a certain level) can be set out. This point is relevant to Work Package 3 of the project. This does not mean that individual countries have to do away with elements that do not occur in the core profile, only that core and non-core elements are clearly displayed.

The third point is that notional hours of study or practice, whether in formal, non-formal or informal contexts can be used to form the basis of a credit system for taking part-qualifications from one country to another. It is up to the sector to determine whether equivalences should be expressed in credit points or not.

The fourth and final point that we wish to make is that core qualifications should be built 'from the ground up' taking into account the needs of the sector. For reasons already explained, referencing should be done at sector level and only later aligned with the overarching EQF framework. Although this does not correspond with the current referencing procedure, it is important to avoid a mismatch between EQF and SQF levels.

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TESTING REPORT

Report on the testing of a proposed EU core profile for Cabinetmaking and Upholstery

Background of the proposal for a core profile

Each partner provided the consortium with a National Report on the organization of VET in the sector of Cabinetmaking and Upholstery. These reports provided the project with the respective qualifications for the professional education in place in the partner countries. To find out commonly shared aspects of these qualifications, the reports were first analyzed by the Arbeit und Leben Bielefeld (DE) institute and later by experts connected to Kings College London (GB). This resulted in a Cross-National Synthesis Report which gave an account of the similarities and differences between qualifications in the seven countries. From this, a qualification profile was constructed. This profile contained all skills, knowledge and competences that were traced as possible common components of the profile.
In this process all partners again confirmed what aspects they were dealing with in their education and curricula.

Testing

The testing procedure aimed at checking if the general core profile developed, based on examination of the seven national reports on the qualifications for each respective occupation and completed by interviews, was correct and could be used well in the individual partner countries. At the end of the project, the common profile developed can serve as benchmark for the professional qualification for cabinetmaking and upholstery in the partner countries.
This could be a potentially good tool for exchange, mobility and innovative professional action within and between the partner countries.

Procedure

The testing consisted of 4 documents:

- a general guideline,

- a description of the profile to be tested,

- a list of testing questions on the profile,

- a marking grid for skills, knowledge and competence (SKC) identified in the profile

The partners from the seven participating EU countries in this Bolster-Up II project had 6-7 weeks to discuss these documents with their respective focus groups. These focus groups were intended to involve those actually working with and deciding upon the qualifications. The results were sent to the partner HMC College, responsible for the work-package testing.

Results

1. Comments

The results of the testing phase were presented in these documents and as comments from the partners on the profile's content. The aim was to trace all comments and remarks that were made. Not all questions were answered by every partner. Some comments were entered in the excel list.

2. Comparative excel sheet

The marking grids received and filled-in on knowledge, skills and professional competences were transferred onto an Excel sheet to obtain a better view of common aspects and the way these are shared by the partners. After each comment or remark, there is a country code or codes for the partner(s) in whose document this was named or found. This does not mean that these are the only countries for which this remark is valid. During the meeting it was possible to complete this even more.

Comments and Remarks on the proposed core profile:

1. Title of qualification. No remarks were made

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2. Level and Duration of Training

Cabinet making

BE	Belgium	EQF Level 3 3 year dual training course, *or* 1 year fulltime school, after 4 year school-based training in cabinetmaking
NL	Netherlands	EQF Level 2,3 and 4 with respective duration 2,3,and 4 years dual training, or school-based with 40% internship
RO	Romania	EQF level 3 and 4
BG	Bulgaria	EQF level 3 4 year dual training course
DK	Denmark	EQF level 4 3 year and 3 to 9 months, dual training
PL	Poland	EQF level 4 3-year vocational school with 3-month vocational training
DE	Germany	EQF level 4 3 year dual training course

Upholstery

BE	Belgium	EQF Level 3 2 year dual training course, *or* 1 year fulltime school, after 4 year school-based training in cabinetmaking
NL	Netherlands	EQF Level 2,3 and 4 with respective duration of 2,3,and 4 years. Level 4 includes entrepreneurship training. The mainstream of education is at level 3 dual training, or school-based with 40% internship

RO	Romania	EQF level 3. Romania is in the middle of a transitional process concerning qualifications.
BG	Bulgaria	EQF level 3 4 year dual training course
DK	Denmark	n.a.
PL	Poland	EQF level 4 3-year vocational school with 3-month vocational training
DE	Germany	EQF level 4 3 year dual training course

3. Description of the profile

The following was to gain a general overview of the remarks that were made by the partners after consulting their focus groups. The remarks were made in different ways so that it was not easy to insert them into tables. The highlights for each country have been selected for mention.

For this approach a picture was obtained of how the professional profile proposed and presented in the testing phase of the project could be or should be changed to be able to function as a possibly shared profile by the partner countries.

This overview was given to the partners and discussed.

Overview in Excel of markings for Knowledge, Skills and Professional Competence
Excel sheets were used as marking grids for the aspects. There were several versions with different instructions on how to complete.

At the end of the testing process for Cabinetmaking, we refer to "Excel testing cabinet maker revised 1.3"and for Upholstery we refer to "Excel testing Upholstery 1.1.

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Conclusions and Considerations

On the description of the profile

If we want to make effective use of a European profile we need to describe common shared aspects in a clear way. Care should be taken however not to make the description too specific to be able to capture the diversity existing in the education in the different countries. It is Important to see too that we share the same perception in using certain words and terminology. A disadvantage of this approach could be that descriptions in the profile are vague and not specific enough to be recognized as important parts of the professional profiles we are dealing with.

On the way we deal with 'competences' and so-called soft skills

There is a tendency to return back from a focus on 'competences' and so called 'soft skills' to a profile description mainly based on the professional activities. It may be a good approach in the profile description to focus on core tasks, the work-processes they contain and to describe the results expected in the work-processes, the knowledge and skills needed for the specific work process, and the behaviour the professional beginner (student/worker) should be able to show. Competences then can remain underlying general activities like: 'analysing', 'applying professional expertise', 'use materials and means', 'accuracy', efficiency etc.

On the different learning paths in the partner countries

We should try to make the formulations in the profile as neutral as possible with respect to where the education takes place, whether this is in a company, in a school or institute or a mixture of both. The EU profile cannot replace the national profiles, as mentioned by most partners, but it can serve as a possible guideline or instrument of comparison.

On innovation

Which techniques are used and needed in the future are unknown. New materials will come up all the time and require new techniques to work with them. An open attitude (behaviour) is probably the most important 'tool' that professional workers need. With the great variety in new materials and techniques, some of these techniques will be sourced out by universal and industrial cabinet makers and upholsterers. An important skill will be to master this process of outsourcing and integrate it smoothly into the company's activities. As an

example: 'look for information' or 'show curiosity for new developments' is an important skill for staying continuously updated concerning new developments.

On the way using a portfolio as a tool in education and mobility

Learning to use a personal digital portfolio and actually using it can be an important and useful tool in the formal educational process, and in lifelong learning. There are many aspects about this to take into account caused by the different forms it can take and the various ways of using it. Often the problems that learners and workers, teachers and instructors and institutes encounter in setting up a portfolio system, lead to the idea that it is too difficult to implement, use and maintain. The different levels and rights to access a portfolio, the formal status and obligations should be clearly described to lead to effective use.

A portfolio can contain images of the work a student or the worker is capable of making and producing. This can be an important help in understanding and judging the capacities of students and workers when they want to migrate to another EU country. Together with formal documents like diplomas a portfolio can help in making mobility of workers and students more efficient. More effective use could/should be made of this potentially strong development tool.

On the way involving more EU countries in the future

To make the profile useful in Europe we should make suggestions to look for ways of enlarging the scope of this Bolster-up II project. Important 'Furniture and Upholstery' countries are not yet taking part in this development of an EU core profile for cabinet makers.

If we want this common profile to work in reality, additional action has to be undertaken. Suggestions will have to come up.

The final project conference and meeting can be a good place to discuss this topic.

The Warsaw meeting and onwards

For this meeting, NL developed a new proposition for the two EU core profiles.

In these profiles it was attempted, where ever possible, to integrate all the remarks of the partners concerning the proposed profile of the testing phase.

- Most partners asked for a more workflow based approach instead of the division into specific task units in the proposed profile.
- The wish to see the profile more workflow oriented led to a new setup.
- This new proposition tries to give a place to the entrepreneurship aspects that are more apparent for workers in SMEs than for workers in the larger industrial companies.
- Common professional tasks were listed and additional tasks for the two designated professional 'lines' (all round professional worker and industrial worker) were added.

The main characteristics of this proposed core profile are:
- in this proposition the profile is work flow oriented and divided into 4 units.
- the profile is vertically divided into an all-round cabinet maker in a small or medium enterprise on the one hand and an industrial worker on the other.
- entrepreneurship is an aspect that is represented as a possibility in the framework of this profile.

List of SKCs

In the Warsaw meeting we started to take a look at the lists with the aspects for knowledge, skills and competences. Here we could see if they were scored as part of the qualification by the individual partner countries. After a fundamental discussion, it was decided that only those aspects that were positively scored by all partners, and therefore scored 7 points in the grid, could be allowed into the profile. This logical but strict approach led to the fact that a lot of aspects of SKCs had to be excluded from a next version of the profile. The result would be that the core profile contains only those aspects of the professional 'luggage' of a professional beginner that are very basic to the profession and that every partner country will effectively do more that in the education and training based on their national qualification system. In Warsaw we were able to do this for cabinetmaking. Due to lack of time the SKC scores for upholstery were gathered and refined through e-mail contact.

Interpretation of terminology

In this meeting we found that for some aspects it had not been clear how they were interpreted by the focus groups in the different partner countries. Also it turned out that

there was confusion about the levels of the professional qualification that were examined by the focus groups in the different countries. It was still not sure if all partner focus groups had considered and reviewed the profile proposition and the SKC list at level 4, as was decided earlier in the project, or whether the rating was in effect also done with the level 3 professional beginner in mind.

Based on the discussions during the meeting, it was decided that all partners would give feedback for the testing again. This was done with a lot of care to see if the aspects were interpreted largely in the same way by all partners. It proved to be difficult to sort out all the misunderstandings and poly-interpretations of the different Skills, Knowledge and Competences.

Added SKCs

Every partner country was also given the possibility to support aspects that were added to the original grid by one or more partners because they found it was missing. Another round of questions to individual partners was part of the additional testing process.

Only a few added aspects that were cited by one or two partners as missing in the profile were supported by other countries. Most did not make it to 7 points, and therefore were not shared sufficiently to enter the profiles we were working on.

Removed SKC's and acceptance

As mentioned above, even those aspects that were supported by 5 or 6 partner countries will not be entered in the core profiles. Aspects that scored even lower, however, still form an integral part of the qualification in one or more partner countries. This could mean that the developed EU profiles are not accepted as substitute for a country's national profile.

Besides, it is clear that there are many legal aspects in each country's qualification framework that make it difficult or even impossible to replace a national profile by an EU core profile. In the answers given by the partner countries in the testing phase, this is confirmed.

The profile can rightly serve as a tool to compare one's national qualification to an EU core profile that contains all the basic and shared aspects.

<u>Development of the latest version of Bolster Up Core profiles for Cabinetmaking and Upholstery</u>

All comments were brought into the SKC lists. In a joint effort of DK, DE and NL, two 'final' versions of the profiles were written. They are work-flow based, divided in 4 units, with only completely shared aspects kept in the profile's description. Short descriptions of the learning outcomes were established.

This version was reported back to all partners in June 2014 with the request to attribute time devoted to the 4 units in their national educational system. This will give us an idea of the importance that is given in each country to the units. The original idea was to do this with the ECVET point system but this proved to be not yet possible.

Summary

General trends

From the testing results we can spot the following answers:

− the profiles must be workflow based to be of good use for training institutes, companies, lifelong learning courses etc.

− in most level 4 education profiles coaching of co-workers is not represented, in others it has its place.

− entrepreneurship is not covered in all the curricula of partners

− client oriented behaviour is less important for industrial workers because there is no direct contact between workers and clients.

− some aspects are considered important enough to be part of a cabinet makers/upholsterers' qualification but are not a part of the regular official curriculum in all countries, and thus cannot be taken into account.

At the end of this long process, we ended up with two EU core profiles and their learning outcomes formulated for the different units. These were presented in the final meeting in Brussels. We will have to consider them as work in progress: the world is changing, production methods are changing, technical and material possibilities are changing.

Our challenge will be to update the profile whenever needed and thus contribute to raising the level of education for our sector in the European community.

EUROPEAN CORE PROFILE "CABINET MAKER"

The Cabinet maker/Wood-mechanic produces furniture and parts of furniture. He or she works as a skilled worker for large and medium sized companies operating in the furniture industry or in small, more craft-based companies.

The cabinet maker

- works in accordance with basic health and safety regulations, including environmental protection and efficient energy use
- Works in a customer-oriented manner
- Considers cost- and time-effectiveness when planning and organizing his/her work in his/her area of influence
- Contributes to continuous improvement of work processes in the company
- Coordinates work with the rest of the team, reports to his/her team leader
- Cooperates with other departments (administrative, commercial and technical services)
- Assists in the implementation of quality assurance activities

The cabinet maker works under the supervision of the team leader/foreperson and has a high level of responsibility for the quality of his/her own work and the work of co-workers. He/she works independently in familiar and predictable contexts. He/she adapts his/her behaviour to the situation when solving problems. He/she is able to investigate new materials and innovative work-methods

A skilled cabinet maker is able to deal with the following aspects of knowledge, skills and competencies:

Unit 1: Preparation of the production of furniture and parts of furniture

Knowledge - knows	Skills – is able to	Competence – is competent to
• acceptance standards • technical drawings, applied mathematics • historical styles • technical regulations • cutting and sharpening techniques • computerized equipment • fittings	• assist in the implementation of quality assurance methods • read technical drawings • select fittings	• act competently within the production system (combine knowledge, skills and professional attitude in everyday work) • understand the logistic process in the plant • work in a way that respects the interests of co-workers and colleagues

Unit 2: Production of furniture and parts of furniture

Knowledge - knows	Skills – is able to	Competence – is competent to
• construction of furniture • joining techniques • ergonomic principles and measurements • different basic materials, wood species • manual tools • woodworking machines, basic maintenance • automated machines, basic maintenance • computerized equipment • measuring methods and tools • wood protection • coatings and techniques to apply • health and safety regulations, personal protection • documentation procedures	• use and carry out basic maintenance of tools and equipment • use and carry out basic maintenance of machines • take measurements • produce furniture parts and furniture • prepare work pieces before coating • apply fluid and solid coatings with manual tools • use automated equipment • use computerized equipment • mount fittings	• control quality of own work • ensure accuracy and reliability • work in a cost and time-effective way • use materials and machines within the whole process efficiently and effectively • take on responsibility for compliance with health and safety regulations

Unit 3: Installing of furniture

Knowledge - knows	Skills – is able to	Competence – is competent to
• mounting and assembly techniques • different types of auxiliary material and its properties and handling • documentation procedures	• combine parts of furniture to a complete furniture • combine different pieces of furniture into an ensemble or to a system	• judge work results, control work process

Unit 4: Completing the work – assignment

Knowledge - knows	Skills – is able to	Competence – is competent to
• basic maintenance of tools and equipment in order to prepare for next work assignment • waste • documentation procedures	• read ,understand and fill in documentation • deal adequately with different types of waste • do basic maintenance	• maintain an overview

EUROPEAN CORE PROFILE "UPHOLSTERER"

The upholsterer produces upholstery and upholstered parts of furniture. He or she works as a skilled worker for large and medium sized companies operating in the upholstery industry or in small, more craft based companies.

The upholsterer

- works in accordance with basic health and safety regulations, including environmental protection and efficient energy use
- Works in a customer-oriented manner
- Considers cost- and time-effectiveness when planning and organizing his/her work in his/her area of influence
- Contributes to continuous improvement of work processes in the company
- Coordinates work with the rest of the team, report to his/her team leader
- Cooperates with other departments (administrative, commercial and technical services)
- Assists in the implementation of quality assurance activities

The upholsterer works under the supervision of the team leader/foreperson and has a high level of responsibility for the quality of his/her own work and the work of co-workers. He/she works independently in familiar and predictable contexts. He/she adapts his/her behaviour to the situation when solving problems. He/she is able to investigate new materials and innovative work-methods

A skilled upholsterer is able to deal with the following aspects of knowledge, skills and competencies:

Unit 1: Preparation of the production of upholstery and upholstery parts

Knowledge - knows	Skills – is able to	Competence – is competent to
• company structure and responsibilities of other departments • the company's data system • technical drawings • fittings • acceptance standards • documentation procedures • technical regulations	• use the company's ICT systems, standard software and workplace-specific software • read technical drawings • choose fittings	• act competently within the production system (combine knowledge, skills and professional attitude in everyday work) • work in a way that respects the interests of co-workers and colleagues

Unit 2: Production of upholstery and upholstery parts

Knowledge - knows	Skills – is able to	Competence – is competent to
• construction of upholstery (and mattresses) • different basic materials • know different types of auxiliary material and their properties and handling techniques • manual tools, basic maintenance • portable electrical and pneumatical tools • measuring methods and tools • health and safety regulations • documentation procedures	• select, check, transport and store materials • deal with materials by hand and machine • use and carry out basic maintenance of tools and equipment • make upholstered parts • cut materials to size • sew covers	• work in a cost and time-effective way • use materials and machines within the whole process efficiently and effectively • ensure accuracy and reliability • take on responsibility for compliance with health and safety regulations • act competently within the production system (combine knowledge, skills and professional attitude in everyday work)

Unit 3: Assembly of upholstered parts

Knowledge - knows	Skills – is able to	Competence – is competent to
• mounting and assembly • fittings	• select and mount fittings	• judge work results, control work process

Unit 4: Completing the work – assignment

Knowledge - knows	Skills – is able to	Competence – is competent to
• documentation • maintenance • waste	• read, understand and fill in documentation • does basic maintenance • deal with waste	• maintain an overview

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MEMORANDUM OF UNDERSTANDING

I. Purpose of the Memorandum of Understanding

The value of a qualification very much depends on trust, trust in its quality and trust in the learning process, i.e. the curriculum, the learning process and the various elements of the respective vocational qualification.

The signatories of this memorandum of understanding are therefore interested in an improved exchange of information, communication and collaboration regarding the various national systems of vocational education in the furniture industry. They are also interested in the learning content and further development of skills, knowledge and competence, new forms of working processes, new technologies used in the sector and the combination of these within a particular form of work-organization.

To remain champions of innovation and quality, the signatories are convinced that the European furniture industry needs to upgrade the qualifications of its workforce. Additionally, we consider it crucial to strengthen the link between product innovation and science and, likewise, to facilitate the permeability between vocational education and universities.

To improve the quality of vocational education structures and practices within the European furniture industry and promote the mutual recognition of certain levels of qualifications, independently of the way this qualification has been gained, and to foster greater flexibility of qualifications and the homogeneity of assessment systems, the present Memorandum of Understanding (MoU) establishes that each signatory organization:

- Recognises the "European Core Profiles" for cabinet makers and upholsterers as they were defined
- Agrees on the MoU fields of activity and implementation measures
- Supports the establishment of a platform for the implementation and recognition of the "European Core Profiles" for the cabinet maker and upholsterer

- Identifies other stakeholders and competent institutions to involve in the process, and

- Supports ongoing work on the European Core Profiles and the extension of the concept to possible further occupations.

To this end and as a basis of common understanding, the following text operationalizes three main objectives of the project entitled "Bolster Up". In this respect the signatories of this Memorandum of Understanding are convinced that intensified cross border cooperation of the various stakeholders in the area of vocational education for the furniture sector is crucial.

II. Operational Objectives

This Memorandum of Understanding pursues the following operational objectives for its entire period of validity:

Objective 1 - The description of the European Core Profile for the cabinet-maker and the upholsterer.

Objective 2 – The establishment of a platform for the implementation of the European Core Profile, including the enlargement of institutions and countries involved in this platform.

Objective 3 – Further development of the European Core Profile, including enhancement of the level of the qualification as well as the enlargement of the core profile concept to other professions within the European Furniture sector.

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III. Operational Objective 1*: Description of a European Core Profile for the cabinet-maker and upholsterer*

Two elements are of the highest importance for the future of the European Furniture Industry, the mobility of workers and a high standard of qualification for the sector's workforce. Greater mobility will not only help to avoid labour shortages in the European furniture industry but also provide a fruitful exchange of traditions, skills, knowledge, competences, work techniques and concepts of intelligent work organization, thereby potentially fostering innovation. The latter aspect also directly refers to the need for higher level qualifications which will pave the way to knowledge-based production with a high degree of innovative capacity and a flexible workforce and work processes (instead of standardized production). The signatories of this Memorandum of Understanding are convinced that the broad scope of the initial vocational training is the best guarantee for an individual to become more flexible in his/her working career and to facilitate further training.

To this end and in the framework of the "Bolster Up" project, the signatories have worked out a number of specific activities, listed below and explained with regard to their purpose:

- Evaluating the national structures of vocational education in the furniture sector and developing an inventory (Annex: synthesis report) with basic information on the systems. In the mid-term and after establishing a stakeholder platform for the European Core Profile, we envisage including other countries in this mapping.
- The synthesis report provides transparency and allows easier comparison of the existing qualifications for cabinet makers and upholsterers in the countries involved in the Bolster Up project.
- The description of a European Core Profile for cabinet-maker and upholsterer, including the description of the qualification in terms of knowledge skills and competence. The profiles themselves are operationalized in learning units, each accompanied by a proposal for a possible timeframe.

- A European Core Profile for the cabinet-maker and upholsterer is not just the common ground detected for vocational education in the respective countries but shall ensure the quality of the education in various aspects, including:
    - the concept of comprehensive and reflective decision making and responsibility
    - the combination of theoretical and practical knowledge;
    - knowledge of materials, technologies and techniques utilised;
    - the inclusion of the whole work process, i.e. preparation, choice of materials and tools, execution and quality control.
- These aspects will also guarantee development towards improved permeability between vocational and higher education
- The European Core Profile for cabinet makers and upholsterers shall become a point of reference for the national training providers in the furniture industry. The signatories' intention is to improve the vocational education for cabinet makers and upholsterers in those countries where the standards are below the level described in the European Core Profile for cabinet makers and upholsterers.
- The European core profiles are designed in a way that they can easily refer to the European Qualification Framework and so respectively to the national Qualifications Frameworks.
- By using the concept of learning outcomes (Units) the European Core Profile is also applicable to non-formal and informal learning paths.

The European social partner organisations for the furniture industry agree that the European Core Profile for the cabinet-maker and upholsterer are mutually recognized as a basic qualification for the respective occupations. They will promote them at the national level and convince the stakeholders responsible to equally recognize this core profile as basic for cabinet-makers and upholsterers. In this respect we consider the concept of European Core Profile as supportive of the process of mutual recognition of qualifications throughout Europe and namely as supporting the implementation of European Directive 2005/36 (revised!). Distinct to the formalized proceedings laid down in the Directive, the European Core Profiles are based on a voluntary approach and on the involvement of social partners and stakeholders in the sector concerned.

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IV. Operational Objective *2: Establishment of a platform for European Core Profiles*

It is the conviction of the signatories that, in the midterm, the tendencies towards the harmonization of skill demands throughout the European furniture industry (and within the international furniture industry) are becoming more evident. The reasons for this harmonization are:

- materials and technologies are used commonly across Europe;

- transnational companies tend to use the same work processes and types of work organisation in all their businesses;

- the process of automation in manufacturing is similar in all EU countries;

- via new information and communication technologies, news and new goods are available everywhere at, more or less, the same time.

In this respect, the Bolster Up project and its close connection to the European Social Dialogue for the furniture industry is considered as a contribution to fostering cross border collaboration between the various stakeholders in the VET field and is also considered as a starting point for the establishment of a platform for European Core Profiles on the following grounds:

- to continue the implementation and testing of the European Core Profiles, the inclusion of more stakeholders from other, than the currently involved seven, EU-countries, is crucial.

- The main aim of the European social partner organisations for the furniture industry is to establish a platform for European Core Profiles at the EU-level. They have agreed on a dissemination plan and, they will connect their activities to the existing structure for vocational education, as provided by the European Social Dialogue for the Furniture Industry.

- Promoting the exchange of information amongst MoU signatories, peer learning through the participation of national representatives, information initiatives and

workshops organized by the European Social Partner organisations (EFBWW, EFIC and UEA)

- Promoting the global concept of European Core Profiles to other sectors of economic activity.

- Future milestones, the European Social partner organizations will:

  – Disseminate the project results and announce the concept of European Core Profiles in all EU-member states during 2014/15

  – Apply for a follow up project in 2015 aimed at better dissemination of the project results and the translation of these results into various EU-languages.

  – Foster the idea of a sector skills council within the framework of the European social dialogue for the furniture industry by attracting further countries and stakeholders from the field of vocational training and to discuss/develop with them the basic concept of European core profiles.

V. Operational Objective 3*: Further development of European Core Profiles*

The knowledge-based society provides more and more opportunities for "new combinations". Innovation circles are accelerating and the resulting effects regarding the skills needed are also accelerating. If our analysis, as pointed out in the above chapter, is correct, that we witness a trend towards the harmonized implementation of these changes, there is good reason to reflect on the consequences for the VET of those professions concerned, also at the European level.

In this respect, it is a precondition to provide opportunities and structures for the stakeholders involved. The signatories of this document believe that the recognized European Social Dialogue for the furniture industry could provide the anchorage ground for such a structure. However, we need specific means to establish a stable structure of communication. The social partner organisations will provide these means.

- Given that the national stakeholders recognize and apply the concept of a European Core Profile, the concept shall be promoted as a concept for the whole sector.

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- The European Social partner organisations for the furniture industry will agree on the final Core Profiles of cabinet-makers and upholsterers defined within the project and mutually recognize the qualifications achieved on the basis of these.

- The signatories will use the European Core Profile to improve the mutual recognition of existing national qualifications, where justifiable.

- The concept of European Core Profiles shall be promoted as a benchmark for all occupations belonging to the European furniture sector.

- Further, the European Social partner organisations will agree on recommendations regarding the recognition of qualifications at the level presented by the European Core Profile for cabinet-maker and upholsterers as gained by an informal or non-formal way of learning.

- At the European level, it is intended to establish the platform for European Core Profiles not only temporarily but as a stable structure under the responsibility of the recognized European social partner organisations.

- Additionally, the concept shall also be promoted towards other sectors of economic activity.

VI. European Core Profiles for Cabinet makers and Upholsterers

a) Core Profile Cabinet Maker

b) Learning Outcomes Cabinet Maker

c) Core Profile Upholsterer

d) Learning Outcomes Upholsterer

OUTLOOK

Core profiles with potential

During the project period the different national requirements for the professions Cabinet Maker and Upholsterers were analysed. Due to the different educational systems the national profiles differ a lot. Common tasks could be identified and built the basis for the European profiles. The main challenge was to find the knowledge, skills and competences at a skilled worker level which are recognised by all partner countries. What the project consortium has succeeded in doing is to identify common core profiles for all partner countries, even though the two professions are not always assigned to the same EQF level. Both developed profiles can only be seen as recommendations at this stage in time.

For the future there is a high potential to use the results out of the Bolster Up project to enhance the profiles to real European core profiles with pathways of recognition. For a further step, representatives of VET institutions and policy-makers should come together to check the quality criteria and VET methods. After a piloting phase, adaptations to the profiles could be made and a more concrete certification pathway developed for the recognition of the European professions. This proceeding will contribute to mobility within Europe.

This publication and the products resulted from the Bolster Up project could be used cross-sectorally. This project has no scientific claim on completeness of all relevant aspects.

APPENDIX I

Aspects that stayed out of the EU cabinet makers core profile

These aspects were mentioned by one or more partners but stayed out of the profile because they were not unanimously shared by all project partners.

Knowledge	Skills	Competences
company structure and responsibility of other departments	use the company's ICT systems, standard software and workplace-specific software	take care of citizenship
the company's data system	design furniture	take on responsibility for dealing with environmental regulations
design of furniture	act according to health and safety principles and regulations	solve problems
portable, electrical and pneumatical tools	act according security regulation incl. environmental protection and efficient energy use	act within innovation team
different producing methods and their work-flows and sequences of operations	select, check, transport and store materials	maintain client contact
packing material	deal with materials by hand and machine	act and cooperate inter-relational (customer-, supplier-contact and cooperation with team and other departments
economic behaviour	mount electrical components according instructions	take on responsibility for dealing with regulations for sending of goods
waste management	use means and transportation and handling	be aware of and take part in compliance with work regulations
environment protection	pack furniture	think innovative, be curious to new developments
efficient energy use	keep to the scheduled maintenance	think entrepreneurial
transport regulations	make construction drawings /sketch/ make auxiliary drawings	develop intercultural competences
properties and proper handling of goods	use and read CNC programming	
know technical terms in a foreign language	make necessary jigs and templates for production	
career and citizenship, lifelong learning, legal aspects of education	use joining techniques	
communication, oral and written	make furniture parts	

native and one foreign language	make and assemble complex constructions	
	install furniture	
	assembly of interior building work	
	restoration of furniture	
	sculpting massive wood furniture ornaments	
	inform customers on use and maintenance	

Note: some of these aspects were considered to be represented enough in aspects that did enter in the core profile as developed after the testing phase.

We want to mention them here to show that at some moment they were identified as possibly belonging to a EU profile for the profession

Aspects that were shared by 5 and 6 partner countries

These aspects were mentioned by 5 or 6 partners in the consortium and identified as part of their respective professional profiles used in education.

However due to decision only to take in those aspects that were traced by seven partners as belonging to the core of their profile and curriculum they did not enter the EU core profile developed in this project.

Unit 1: Preparation of the production of furniture and parts of furniture		
Knowledge	**Skills**	**Competence**
-company structure and responsibility of other departments (6) -the company`s data system (6) -design of furniture (6)	-software and workplace-specific software (6) -select and check materials (6) -speak idiomatically and professionally -use the company`s ICT system, and standard software (6)	-solve problems (6) -act within innovation team (6) -act and cooperate inter--relational (customer, supplier-contact and -cooperation with team and other departments) (6) -reflect on possibilities for improving processes (6) - look for information (5)
Unit 2 Production of furniture and parts of furniture		
Knowledge	**Skills**	**Competence**
-portable, electrical and pneumatically tools (6) -storage of materials (5) -different producing methods and their work-flow and sequence of operations (6) -economic behavior (5) -environment protection (6) -efficient energy use(5)	-act according to health and safety principles and regulations (6) -act according security regulation incl. -Environmental protection and efficient energy use (6) -transport and store materials (6) -deal with materials by hand and	-take care of citizenship (5) -take on responsibility for dealing with environmental regulations (6) -solve problems (6) -act within innovation team (6) -work in customer oriented manner (5) -act and cooperate inter-relational (6)

	machine (6) -protect wood with special construction (5) -speak idiomatically and professionally (6) -keep to the scheduled maintenance (6)	-reflect on possibilities for improving processes (6) -be aware of and take part in compliance with work regulations (6)
Unit 3 Installing of furniture		
-economic behavior (5) -efficient energy use (5)	-select and check materials (6)	-take on responsibility for - dealing with environmental regulations (6) -solve problems (6) -work in customer oriented manner (5) -act and cooperate inter-relational (6) -reflect on possibilities for improving processes (6)
Unit 4 Completing the work – assignment		
-waste management (5) -storage of furniture (5) -properties and proper handling of goods (5)	-control the function of movable elements (5) - repair furniture (5)	-act and cooperate interrelational (6)

APPENDIX II

Aspects that stayed out of the EU upholsterers core profile

These aspects were mentioned by one or more partners but stayed out of the profile because they were not unanimously shared by all project partners.

Knowledge	Skills	Competences
Automated machines	look for information	understand the logistic process in the plant
computerized equipment	comply with health and safety principles and regulations	speak idiomatically and professionally
different productions methods	comply with security regulation incl. environmental protection and efficient energy use	take care of citizenship
packing material	use and maintenance of machines	take on responsibility for compliance with security regulations
economic behaviour	take measurements	take on responsibility for dealing with environmental regulations
waste management	design cover patterns	solve problems
environment protection	prepare pad parts	act within innovation team
efficient energy use	upholster parts	Maintain client contact
storage of materials and upholstery	mount electrical components	cooperate inter-relational (customer-, supplier-contact and cooperation with team and other departments
transport regulations	use automated and computerized equipment	work in a way that respects the interests of co-workers and colleagues
properties and proper handling of goods	control the function of movable elements	reflect on possibilities for improving processes
know technical terms in a foreign language	repair upholstery	take on responsibility for dealing with regulations for sending of goods
legal aspects of the education	use means of transportation and handling	be aware of and take part in compliance with work regulations
work flow, sequence of operations	deal adequately with different types of waste	show capability to work with new innovative materials and appropriate techniques
development of new upholstered models development of new upholstered models	keep to the scheduled maintenance	show readiness to work with newly introduced production processes
career and citizenship	pack upholstery	show intercultural competences
ergonomic principles	control quality of own work	work in the necessary pace to meet the work planning

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	assist in implementation of quality assurance methods	
	design and construct furniture for upholstery	
	make technical drawings	
	assemble upholstered parts	
	make cutting templates	
	cut material with respect to pattern, pile or nap	
	protect data	
	monitor production process and work-flow	
	Inform customers on use and maintenance	

Note: some of these aspects were considered to be represented enough in aspects that did enter in the core profile as developed after the testing phase.

However due to decision only to take in those aspects that were traced by seven partners as belonging to the core of their profile and curriculum they did not enter the EU core profile developed in this project.

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Bulgarian Branch Chamber of Woodworking and Furniture Industry, BG
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