



European Federation
of Building
and Woodworkers



Education and Culture DG

Lifelong Learning Programme

**Leonardo Da Vinci Project
„Bricklayer“**

Bricklaying Country report

Poland

- D R A F T -

Zbigniew Janowski

Jakub A. Kus



Preface

Main features of the country and VET system

Poland: 38 116 000 inhabitants (2007).

Level of education of population over 13 years (33 091 000):

- higher education – 5 075 000;
- general secondary & post secondary – 10 964 000;
- basic vocational – 7 493 000;
- lower secondary – 1 832 000;
- primary – 6 928 000.

The educational system in Poland functions according to the Education System Act of 7 IX 1991 (uniform text Journal of Laws 2004 No. 256, item 2572, with later amendments) and the Act of 27 VII 2005 — Higher Education Law (Journal of Laws No. 164, item 1365) with later amendments. A new system is still under construction. On 1 IX 1999, the reform of the school system was initiated, the rules of which were regulated by the Law of 8 I 1999 — Regulations introducing the reform of the school system (Journal of Laws No. 12, item 96) with later amendments. The reform concerns both general education structures and VET structures.

In 1999/2000 compulsory 6-year primary schools and 3-year lower secondary schools (gymnasium) were established, instead of 8-year primary schools. In the gymnasium programme some elements of pre-vocational education were introduced. Before 1999 there was no distinction between lower and upper secondary schools. The lower secondary level was included in the 8 year homogenous structure school. Since 1999 the 3 year compulsory gymnasium school constitutes the lower secondary level. In fact it can be recognised as an IVET (initial vocational education and training) level school, with limitation. The curriculum provides a very limited programme of preparation for the labour market, basic computer abilities and technology. There are no alternative school structures on this level.

In the 2004/05 school year — for graduates of basic vocational schools — 2-year supplementary general schools and 3-year supplementary technical schools were introduced.

VET (vocational education and training) in Poland is structurally divided. The first VET path is connected with formal educational structures (public schools and VET centres) and supervised by the Ministry of National Education. The second path is connected directly with the labour market and supervised by the Ministry of Labour and Social Policy. The VET institution can be registered as an educational and/or labour market training institution. Certification of occupational competences can be acquired by external exams supervised by the Ministry of Education (Central Examination Board).

SCHOOLS 2007/08 Specification

Schools:

14330 *primary*

7142 *lower secondary*

370 *special job-training*

1769 *basic vocational*

2398 *general secondary*

73 *supplementary general secondary*

1184 *specialized secondary*

2233 *technical secondary*

214 *supplementary technical secondary*

110b *general art*

3337 *post-secondary*

455 tertiary
3651 for adults
6 primary
122 lower secondary
99 basic vocational
1101 general secondary
1179 supplementary general secondary
97 specialized secondary
287 technical secondary
760 supplementary technical secondary

PUPILS AND STUDENTS in thousands 2007/08

343.4 Pre-primary education

Schools:

2375.2 primary
1453.2 lower secondary
7.9 special job-training
235.6 basic vocational
713.3 general secondary
2.0 supplementary general secondary
110.5 specialized secondary
542.0 technical secondary
7.4 supplementary technical secondary
13.2 general art
301.6 post-secondary
1937.4 tertiary

General data concerning basic vocational schools;

2007/08, numbers of:

- basic vocational school leavers - 70 100
- students of basic vocational schools (construction and architecture profile) –23 973
- basic vocational school leavers (construction and architecture profile) - 6213

I. Governance

1.1 What are the institutional and legal frameworks for VET regulation?

a) for the sector

There is no separate institutional and legal system for the sector. The legal bases for vocational education have been determined in the Act on the Education System. There are a number of legal deeds referring directly to vocational education contained in Acts, ordinances and orders. The institutional structure of bricklayer vocational education is described in Figure 1 below. System components that enable the achievement of an official confirmation of bricklaying professional qualifications (only by way of an external exam confirming the qualifications) have been marked in the system with green colour.

b) for bricklaying/masonry itself?

The Minister of National Education approves the core curriculum of bricklayer vocational education (symbol 712 (06)). The core curriculum determines 80% of the educational scope and conditions. The other 20% of the education is devoted to adjusting the curriculum to the demands of particular labour market needs. The core curriculum corresponds to the requirements of the external exam confirming the qualifications and the standard of bricklaying professional qualifications. Therefore, it must consider legal regulations determining the conditions of practising the bricklayer profession (below).

Fig. 1: Main components of VET System with training structures for bricklayers (green)

VET SYSTEM	
IVET	<ul style="list-style-type: none"> ▪ Basic vocational school (2 to 3-year basic vocational school) - institution offering 2 to 3 years of full-time upper secondary vocational education for students aged 16 to 18. The leavers have access to the trade or occupation or to the supplementary technical or supplementary lyceum schools. ▪ <i>Technical school</i> (4-year technical secondary school) - institution offering 4 years of full-time technical and vocational upper secondary education for students aged 16 to 20. The <i>Matura</i> examination is necessary for admission to higher education. ▪ <i>Profiled lyceum</i> (3-year specialised secondary school) - new institution established in 2002/03 offering 3 years of full-time general and specialised upper secondary education for students aged 16 to 19. It offers the <i>Matura</i> examination necessary for admission to higher education. ▪ <i>Supplementary technical school</i> (3-year supplementary secondary technical school) – new institution introduced in 2004/05 offering 3 years of full- or part-time vocational upper secondary education for students aged 18 to 21 in preparation for the <i>Matura</i> examination. This school is meant for the leavers of the 2/3-year vocational school. ▪ <i>Post lyceum school</i> ▪ Post secondary vocational schools (maximum 3-year post-secondary school) - this institution enables people with secondary education to obtain a vocational qualification diploma upon passing of an exam. Education in post-lyceum schools takes between 1 and 3 years. Post-lyceum school graduates acquire the qualification of technician or skilled worker, which they may confirm through an external vocational exam. Vocational profiles these types of schools offer include: technical sciences, economics and commerce, administration, general services, medical & social services, agriculture, culture and arts. Every fifth student graduates from IT or economics/commerce profiles. ▪ <i>Foreign language teachers training colleges</i> Graduates from foreign language teacher colleges obtain qualifications entitling them to teach a foreign language in primary, lower and upper secondary schools. The education takes 3 years. ▪ <i>Teachers training colleges</i> This type of teacher colleges prepare teachers for kindergartens, primary schools and other educational establishments. The education in teacher colleges takes 3 years. ▪ <i>Higher vocational schools (bachelor degree)</i> Higher vocational schools offer 4-year engineering programmes or 3-year licentiate programmes focused on preparing graduates for a particular profession. The essential element of these programmes is 15 weeks of practical training. Higher education institutions of academic character, i.e. universities and polytechnic schools, also provide 3-year vocational programmes leading to a vocational title of a licentiate or 4-year engineer programmes. However, since they are regulated by different standards and legislation, their curricula does not necessarily include a 15-week period of practical instruction. The graduates from licentiate and engineer studies are entitled to continue education at supplementary 2 or 2.5- year Master’s courses. ▪ <i>Universities and other high schools (bachelor and master degree)</i> ▪ <i>Doctoral. studies</i>
CVET	<ul style="list-style-type: none"> • Public and non-public schools for adults; *(budget financed without tuition fee) <ul style="list-style-type: none"> ▪ Basic vocational school (evening and weekend) ▪ Technical school (evening and weekend) ▪ Profiled lyceum (evening and weekend) • Continuing education centres (CKU) and practical training centres (CKP); <ul style="list-style-type: none"> • Branch upgrading and further education centres; • Higher education institutions, units of the Polish Academy of Science, research institutes; • Labour market institutions, including Voluntary Labour Corps; (budget financed without tuition fee) • Private training companies; (courses, seminars, training, conferences) • Enterprises (employers);

	<ul style="list-style-type: none"> • Associations, foundations and other corporate bodies and individuals.
	the same programme as in the IVET schools
Apprentice ship	<ul style="list-style-type: none"> ▪ Voluntary Labour Corps centres ▪ Employers united in Polish Union of Crafts and Polish Chamber of Commerce

Source: THEMATIC OVERVIEW The vocational education and training (VET) system of Poland
CEDEFOP/Refénet, Ministry of National Education: www.men.gov.pl

Legal basis for performance of the bricklaying profession

- The Building Law dated 7th July 1994, uniform text (Journal of Laws of 2000, no. 106 item 1126).
- The act dated 27th March 2003, amending Building Law and some other acts (Journal of Laws dated 10th May 2003, No. 80 item 718).
- Regulation of the Minister for Land Development and Construction dated 30th December 1994, on independent technical functions in the construction industry (Journal of Laws of 1995, no. 8 item 38).
- Regulation of the Infrastructure Minister dated 27th August 2002 on the detailed scope and form for safety and health protection plan, and the detailed scope of types of construction work which pose threats to human health and security (Journal of Laws no. 151 item 1256).
- Regulation of the Minister of Economic Affairs dated 20th September 2001, on issues of safety and hygiene during the operation of machinery and other technical equipment used for earth, construction and road works (Journal of Laws no. 118 item 1263).
- Regulation of the Minister of Infrastructure dated 6th February 2003, on issues of safety and hygiene during the execution of construction works¹ (Journal of Laws no. 47 item 401).
- Regulation of the Infrastructure Minister dated 26th April 2002 on the specimens and manner for maintaining central register of persons holding building licenses, building experts and persons penalised with relation to professional liability in construction (Journal of Laws no. 62 item 565).

1.2 What are the processes for developing, recognising and regulating qualifications and skills?

Bricklaying professional qualifications are recognised on the basis of the professional qualification standard (712102). The standard is created at the request of the Ministry of Labour and Social Policy by teams of experts who closely cooperate with enterprises employing bricklayers, the academic circle and administration in charge of legal implementation. The standard is approved by the Minister of Labour. The examination standards created on the basis of the aforementioned standard and curriculum are prepared by the Central Examination Board, which also prepares examination tasks. The Minister of Education is also responsible for the accreditation of training facilities authorised to educate bricklayers.

1.3 What is the role of the following in these processes and in VET provision:

- ***the state?:*** The main government body responsible for VET financing supervision and (partly) for direct financing of some VET elements is the Ministry of National Education. There are several other Ministries providing and co-ordinating VET activity at ‘sectoral’ level: Ministry of Science and Higher Education, Ministry of Culture and National Heritage (artistic schools), Ministry of International Affairs (schools for Poles in another countries), Ministry of Justice, Ministry of National Defence, Ministry of Environment, Ministry of Labour and Social Policy. The state is the directly governing body for 33 basic vocational schools.
 - ***local self government structur:*** Governing bodies for the majority of vocational schools (basic vocational schools – 1975 and technical secondary schools). Financing structures for VET (30%)
 - ***the social partners (trade unions and employers associations)?:*** The main institutional platform for social partners’ involvement in vocational education and training at the national level is the **Tripartite Commission on Socio-Economic Issues** (*Komisja Trójstronna ds. Społeczno-Gospodarczych*), established by the resolution of the Council
-

of Ministers of 15 February 1994. The Tripartite Commission is composed of representatives of public administration, employers such as the Business Centre Club, the Confederation of Polish Employers, the Polish Confederation of Private Employers, the Association of Polish Crafts and the National Chamber of Commerce, the largest trade unions (NSZZ Solidarnosc, OPZZ and Trade Unions' Forum) as well as some sectoral trade unions. All these organisations, representing employers and employees, function in two capacities: **consultatively and as initiators of legal measures in the field of vocational education**. Another body for social dialogue operating at the national level is **the Central Employment Board** (*Naczelna Rada Zatrudnienia*), which fulfils **an advisory role to the Minister of Labour**.

Both main union and employer organisations are involved in political processes. VET issues are not located at the top of peak union and employers' organisations agenda. However, some **industrial and teachers trade unions are involved in professional standards preparation**. There were a few attempts to establish trade unions own vocational schools or centres with limited success. Much more popular is trade union involvement in the realisation of international VET projects – Leonardo da Vinci (as partner organisations mainly).

- **educationalists?:** These are obviously important to the successful implementation of policy reform. They comprise the professional core of education and provision without which no formal system can operate, though they are to be found throughout the non-formal sector also - something which is not always recognised. Teachers, educators and trainers are not involved in VET financing, but the low level of average wages, connected with shortages of 'teacher supply' for the educational market, and the big efforts to raise teachers wages are important factors for the future structure of VET finance.
- **Employers, trade associations, guilds, chambers?:** At the level of enterprises, involvement in VET is mostly through either the organisation of practical training or vocational placements for vocational school pupils on the basis of agreements concluded between employers and particular schools or organising vocational training under the apprenticeship scheme as occurs mainly in the case of enterprises associated in the Association of Polish Artisanry/ Craftsmen. Financial involvement of bigger employers and small firms can be introduced by the Training Fund, initially voluntary but formally obligatory from 2008. All employers are obliged to finance OSH training for employees.
- **Professional associations:** These are key to the maintenance and development of professional standards in any advanced society. In Poland, in the provision of adult education and training, as of education and training generally, is rather weak and must be involved actively in any reform of the system and in its subsequent operation. However, some professional associations (professional chambers, Association of Polish Artisanry,) play a significant role in VET **as schools supporters or providers**
- **International companies:** There is a limited (not significant) role for international companies in VET. Some of them provide internal training based on company procedures and internally recognised.

1.4 What type/size/sector of activity are those employers involved?

No data

1.5 What is the division of funding and sources of finance?

The Polish public VET system is free of charge (formally) at all the levels of education. The funding system is based on a central subsidy from the state budget (app.70%) and subsidies from non-governmental sources (app. 30%). Private schools (centres, courses) are financed

from private funds (tuition fees, donations) and partly from public sources. Public CVET (continuing vocational education and training) structures are financed from public sources (free of charge). Tertiary level (both public and private) is financed from private sources (tuition fees) and partly from public funds.

1.6 What is the relationship between public and private training providers?

Schools (with the exception of higher education institutions) and non-school educational/training institutions according to Polish law can be public, non-public, with Ministry of National Education authorisation of a public school (public subvention financed), and non-public (privately financed). A non-public school can obtain the competence of a public school if it implements the minimum programme as well as applies the principles of classifying and promoting pupils and students as established by the Ministry of National Education, allowing students to obtain state certificates or diplomas. Central (government) entities and local self-government entities can only administer public schools. Primary schools and lower secondary schools can be public schools or non-public schools with the competence of public schools only. Public educational institutions are owned by public subjects (governmental or self-governmental). Private operators/owners can receive public status for schools, and use the educational part of public subvention but they are obliged to recognise public schools' curriculum and rules. Non public educational institutions are not financed from educational subvention and are permitted to collect tuition fees and establish their own curricula in very general frames.

Bricklaying vocational education takes place in vocational schools (3 years). The vast majority of these include public schools and private schools with the credentials of a public school. Bricklayer education may also take place in small companies (members of Polish Craftsmen Union) – apprenticeship - and can be partially financed from public funds.

1.7 What changes are taking place in governance?

The main changes are presented in Figure 2 below. The Polish education system, including the vocational education system, was thoroughly transformed after 1999. The system reform has been implemented to date and refers mainly to the VET system, including life-long education and accreditation of prior learning (APL).

1.8 What role, if any, does the collective agreement play?

The significance of collective agreements in shaping educational policy is small. In Poland, there is no commonly applicable (generally binding) inter-company collective agreement for the construction industry. Few collective agreements applicable at enterprises provide for regulations regarding vocational education. Only large international construction companies have their own training and educational policy, which is reflected in agreements.

1.9 Who are the key players concerning NQF and EQF?

The main institution working on the creation of the National Qualification Framework in the context of the European Qualification Framework is the Ministry of Education. The Minister has appointed a team of experts dealing with that matter. The team consists of, among others, representatives of KOWEZIU (National Centre for supporting vocational and continuing education) and the Educational Research Institute.

THE EDUCATION SYSTEM IN POLAND

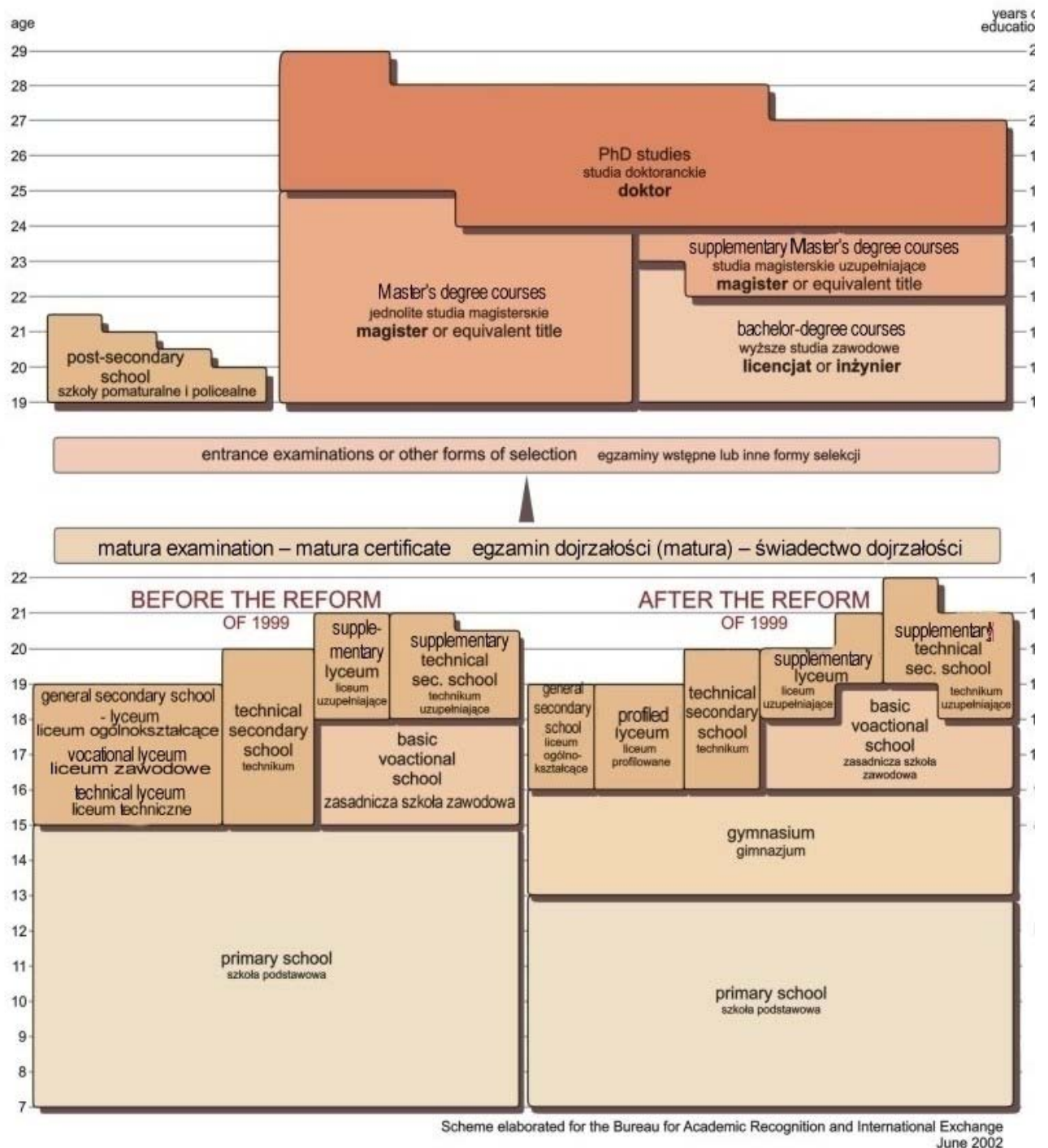


Figure 2

II. Vocational Education and Learning

2.1 What is the entry requirement (expected school or VET qualification level)?

Gymnasium (3 year compulsory lower secondary school with IVET elements) – initial secondary education for students aged 13 to 16. At the end of the 3rd year an external examination has been introduced, in 2002, for the first time. The results of the exam are indicated on the gymnasium leaving certificate. A positive result is the entry requirement for further education (VET or academic). The entry requirement for apprenticeship is the same.

2.2 What is the type and required duration of VET to obtain bricklaying qualifications

The main type is 3 years basic vocational school. Additionally, one year post-lyceum vocational supplementary school is theoretically possible because there are no appropriate curricula for this school. Apprenticeship is limited to 3 years.

2.3 What are the main locations of VET provision?

The main location for technical education is the classroom and, for practical training, the school workshop. During the 3 year course, 4 weeks of obligatory practice (II and III course) is provided in companies or Practical Training Centres. For apprenticeship – small company and classroom.

2.4 What happens in each place and how is this monitored? By whom?

Classroom – technical education – monitoring on the base of curricula and quality school standards – by teachers and school director;

School workshop – practical education – monitoring by practical training school instructor;

Company – (obligatory practice) – monitoring by school teachers in co-operation with practical training company instructor (tutor);

Company – (apprenticeship) – monitoring by company owner (according apprenticeship agreement, quality standards and curricula) or tutor/experienced worker.

2.5 What pedagogical approaches does it involve (e.g. directive, self-directed, interactive)?

Directive – school

Directive, interactive – workshop, company

2.6 How does VET provision relate to workplace practice?

There is a significant lack of practice in VET formal (school) education. There are no system solutions for organising practice in companies (co-operation of schools and companies is limited). It is possible for the school and company to sign an agreement on practical training for students. But in practice there are a very limited number of agreements. Companies are not encouraged to join this system. The reason: lack of legal frameworks, problems with OSH (occupational safety and health) responsibility, insurance, lack of company tutors. There is no system of financial support or reimbursement of costs for ‘training’ companies (the only exemption: the Polish Craft Association). Income-oriented companies are neither obliged nor interested in practical training and supervision of students.

2.7 What are closely-related occupations within VET provision?

The group of construction-related occupations consists of 14 positions (directly) and 32 positions in the wider group of occupations. Closely related with bricklayers are plasterers, concrete workers, stoneworkers, carpenters, roofers, fitters.

2.8 How far does VET cover other related occupational areas?

VET (formal) covers the majority of related occupational areas. Formal VET (schools education) covers almost all related areas (plasterers, concrete workers, stoneworkers, carpenters, roofers, fitters) on the basis of curricula approved by Ministry of Education.

2.9 How does theory relate to practice?

This relation is described in curricula and standard of voc. qualifications.

2.10 What is the structure and content of the curriculum?

In terms of the content of bricklaying VET, there are no differences in the various pathways. The curriculum as the basis is in fact the same for public, **non-public and apprenticeship paths.**

- I. Framework of VET in occupation
 - 1) Description of graduates qualifications
 - 2) Specify requirements of VET in the occupation

II. Hours division (programme blocks)

- Construction basic information and knowledge – 20% hours
- Bricklaying and plastering works technology and techniques –50% hours
- Basic information about economics and professional activity –10% hours

20% of hours are allowed for authors of programmes/teachers and connecting with labour market needs

III. Programme blocks description (3 blocks)

BLOCK Construction Basic information and knowledge

1. Aims of education

Pupil (listener) as a result of education should know how to:

- 1) use building nomenclature;
- 2) recognize the types and the elements of buildings;
- 3) define the constructions and the technologies for realizing buildings;
- 4) define property as well as estimate the quality of building materials;
- 5) apply the principles of organization of workplace as well as the building site;
- 6) define the principles of storing and transportation of building materials;
- 7) define the principles of use of scaffolding;
- 8) define the principles of executing carpentry work, reinforcing, concrete work (*betoniarskich*), insulation and painting;
- 9) apply the regulations of safety and the hygiene at work, fire-fighting protection as well as environmental protection valid on building site;
- 10) prepare the drawings of figures and geometrical solids;
- 11) define and describe technical drawings;
- 12) apply the principles of executing sections, horizontal and axonometric sights;
- 13) read sign graphic on drawings;
- 14) distinguish the types and the elements of technical records;
- 15) use technical records;
- 16) execute straight lines, drawings and drafts of building elements;
- 17) use measuring instruments;
- 18) execute pre-quantity surveys and quantity surveys of bricklaying works;
- 19) execute stock-taking drawings.

2. Content of education

Educational content is captured in the following programme sections:

- 1) the types of buildings and the building structures;
- 2) constructional elements and non-constructional elements of buildings;
- 3) the technologies of realization of buildings;
- 4) building materials;
- 5) the square of building and his organization;
- 6) storing and the transportation of building materials;
- 7) the principle of assembly and the use of scaffoldings and the working platforms;
- 8) carpentry, reinforcing, painting; concreting
- 9) regulations of safety and the hygiene of work, the fire - fighting protection as well as the protection of environment;
- 10) types of technical drawings;
- 11) figure and geometrical clods;
- 12) the principle of the measurement of drawings;
- 13) rectangular and axonometric sights ;
- 14) hand-made drawing and schematic;
- 15) the types and elements of records;
- 16) graphic sign on technical drawings;

- 17) pre-quantity surveys and quantity surveys of works;
- 18) stock-taking drawing.

BLOCK TECHNOLOGY OF BRICKLAYERS AND PLASTERER'S WORKS

1. Aims of education

Pupil (listener) as a result of education should know how to:

- 0) organize the position of work with technological requirements, regulations of safety and the hygiene of work, the fire - fighting protection as well as the protection of the environment;
- 1) choose bricklaying and plastering materials;
- 2) use tools, devices and equipment for bricklaying, plastering and auxiliary;
- 3) store and transport materials as well as building equipment;
- 4) execute indispensable earth works;
- 5) plan in relation to bricklaying works, plastering and auxiliary;
- 6) assemble, exploit and disassemble external scaffoldings and internal;
- 7) execute auxiliary work, concreting, carpentry, reinforcing and insulation;
- 8) prepare building mortars and concretes to bricklaying and auxiliary works ; execute perpendicular wall constructions from different materials;
- 9) execute walls with chimneys, channels, combustion and ventilation;
- 10) execute brick horizontal constructions as well as vaults;
- 11) execute dilatations in wall constructions ;
- 12) execute sectional walls from different materials;
- 13) execute external and internal plastering;
- 14) execute joining and harmonizing walls;
- 15) settle elements of woodwork and building ironworks;
- 16) execute bricklaying and plastering in low surrounding temperatures;
- 17) execute repairs and the repair of wall constructions;
- 18) execute works connected with the demolition of brick elements;
- 19) execute quantity surveying of bricklaying and plastering works
- 20) prepare costs estimates as well as to count the due amount of work executed
- 21) evaluate work executed.

2. Content of education

Educational content is also captured in the following programme sections:

- 1) the organization of bricklaying and plastering work ;
- 2) materials, tools and equipment for bricklaying work;
- 3) earthworks;
- 4) building mortars and concretes;
- 5) executing load bearing walls;
- 6) executing sectional walls from brick and different materials;
- 7) executing complex (composite) construction walls;
- 8) ceilings, lintels and cornices;
- 9) woodwork and building ironwork;
- 10) concrete work, reinforcing and carpentry;
- 11) plastering and facing;
- 12) joining and harmonizing walls;
- 13) repair and the repairs of walls;
- 14) demolition work;
- 15) the acceptance of the bricklaying and plastering works.

BLOCK BASIC INFORMATION ON ECONOMIC AND PROFESSIONAL ACTIVITY

1. Aims of education

Pupil (listener) as a result of education should know:

- 0) to define basic economic notions;
- 1) to explain the functioning mechanisms of the building market economy;
- 2) to interpret the basic notions of a market economy;
- 3) to apply building, tax and banking; law regulations
- 4) to use different sources of economic and legal knowledge;
- 5) to apply a range of Labour code concerning duties of workers and employers;
- 6) to apply regulations concerning work safety and hygiene, fire - fighting protection as well as environmental protection;
- 7) to prevent risks to health and life;
- 8) to apply regulations on individual protection to different types of work executed;
- 9) to organize the worksite according to ergonomic requirements;
- 10) to apply active methods in the search for employment;
- 11) to prepare documents relating to employment as well as to economic activity;
- 12) to communicate and co-operate in a team;
- 13) to solve problems;
- 14) to make decisions;
- 15) to perfect professional skills;
- 16) to apply principles of ethical conduct in professional activity.

2. Content of education

The content of education is captured in the following programme sections:

- 0) the basis of a market economy;
- 1) legal forms of building enterprise;
- 2) regulations on building law, tax and banking;
- 3) labour rights and responsibilities;
- 4) safety and hygiene at work;
- 5) fire fighting protection and the protection of environment;
- 6) the elements of ergonomics;
- 7) principles and methods of communication;
- 8) basic notions of a market economy;
- 9) enterprise and the leadership of economic activity;
- 10) principles of the sociology and psychology of work;
- 11) ethical principles.

- What is the scope of activities involved?

80% of activities are described in curricula, 20% is under teachers own discretion

- What are the general educational elements?

General educational elements are not defined in the bricklayer VET curricula. But integral elements of the curricula are general knowledge concerning construction, building materials, building law.

2.11 What are the proportions and types of students by level of qualification and as % of workers in the occupation?

No statistical data available. In the opinion of the sectoral social partners, the VET system provides only one-quarter of graduates – skilled workers according to industry needs. The estimated number of all graduates (bricklayers – formal and apprenticeship) in 2008 was 3500 – 4000.

2.12 What are the completion/ drop-out rates?

The completion rate for apprenticeship is 80%. The completion rate of the basic vocational schools does not always mean completion of the bricklayer programme, as students may decide to change specialisation.

2.13 What is the extent of modularisation?

Under construction. The process is not finished.

2.14 Do courses allow for accreditation of prior learning (APL)?

No, not yet.

2.15 How important is informal learning and what forms does it take (e.g. tutorship)?

The role of informal learning is limited and supportive. Graduates of formal VET, in the opinion of employers, need practice (due limited practice during the formal VET process – limited time and possibilities of practice directly in companies). There are formal tutors (employed) or informal (experienced workers) in the companies.

2.16 What is the role, nature and organisation of continuing VET ?

See description of structure in the table chapter 1.1 a)

2.17 What changes are occurring in VET for bricklaying? What are the reasons for these?

Possible changes: modularization, new description (and classification of qualifications), APL certification. The new system of groups of professions is under construction, as well as the process of separating qualifications from homogenous professions. The aim is the certification of separate competences according to market needs.

III. Qualification

3.1 What are the relevant bricklaying qualifications (including at different levels)?

Assignment of positions to the levels of professional qualifications

Level of professional qualifications	Typical positions
1	*)
2	– Mason – Plasterer
3	– Supervisor
4	*)
5	*)

*) *Not identified*

Parts of occupational qualifications are not modules. We can describe them as competences or complex vocational tasks possible – in intention - to certificate separately. It is a complete list from the standard of vocational qualifications (not from curricula). There is now an ongoing project aiming to redefine parts of the occupational qualifications on the basis of real market needs and employment possibilities after certification related to each of separate parts/competences.

Q1. Building load-bearing walls.

Q2. Building partition walls.

Q3. Building foundations, reinforced walls, lintels, floors with steel joists/brick infill, suspended beam and block floorings, and arched vaults.

Q4. Performing auxiliary masonry tasks (mixing mortar, transporting materials to workstation, etc.).

Q5. Performing associated works (laying insulation, cladding, etc.)

3.3 How are occupational standards defined, and what is their role?

A vocational qualifications standard is defined as:

A norm of minimum qualification requirements in the system of five qualification levels that is accepted by representatives of employers, employees and other key social partners participating in economic affairs and the labour market. The qualifications are divided into qualifications connected with typical work stations or occupational tasks, qualifications: (qualifications in Poland till now are defined more as competences in UK than as certified competences) over-vocational, general vocational, basic and special qualifications for a profession describing a set of indispensable skills, knowledge and psycho-physical features corresponding with the occupational tasks and qualifications in a profession that guarantee a required quality of work performed in this profession. (Kwiatkowski S. M., Woźniak I., 2003)

This shows levels or dimension of qualifications (see explanation above) structuring the standard of vocational qualifications. Qualifications are competence based. The vocational qualification standards for the bricklaying profession are created at the request of the Ministry of Labour by independent teams of experts who cooperate with sectoral partners (enterprises employing bricklayers) and branch organisations. The standard is approved by the Minister of Labour.

3.4 What is the understanding of and relationship between learning inputs and outputs?

Still not defined but under discussion.

3.5 What is the role of formal, informal and non-formal learning processes?

An official process based on education at school plays an essential role in the education of bricklayers. Currently the informal education process is insignificant, since it is not possible to certify APL. In practice, there are many people working in the sector who acquired significant qualifications in the work process and who work as building assistants. The non-formal learning process (apprenticeship) has limited scope – only under the frameworks of the Union of Crafts member companies and Voluntary Labour Corps.

3.6 What is the role of curricula?

The core curriculum constitutes the key component of vocational education. In the case of general education, the core determines up to 80% of the curriculum. The figure is the same in the case of vocational education. The core curriculum is correlated with professional qualification standards and examination standards. These are key components of coherence of the education and the certification system.

3.7 How are learning outcomes defined and what is their role?

The learning / training effects/outputs are described in terms of knowledge and skills. The desired scope has been contained in both, the core curriculum and the examination requirements (where they have been described in detail). They are indirectly also defined by the professional qualification standard determining the knowledge, skills required at individual levels, and expected psycho-physical skills (which may result from education only to a limited extent).

3.8 What is the assessment process and who is involved?

The year 2004 was the first year of introduction of an external vocational exam for 2 year basic vocational schools and in the next years for all kinds of vocational schools (and all kinds of VET). This exam (in two parts – practical and theoretical) is based on standards of vocational qualifications and obligatory for confirming vocational qualifications.

The examination confirming bricklayer's professional qualifications is conducted on the basis of:

- the Ordinance of the Minister of National Education of March 21st, 2001 on conditions and manner of assessment, qualifying and promoting pupils and students and conducting exams and tests in state schools (J. of Laws of 2001, no. 29, item 323, dated April 6th, 2001, as amended);
- the Ordinance of the Minister of National Education and Sport of May 8th, 2004 on classification of professions in higher education (J. of Laws of 2004, no. 114, item 1195, dated May 19th, 2004, as amended);
- the Ordinance of the Minister of National Education and Sport of February 3rd, 2003 on standards of requirements being the basis for examination confirming professional qualifications (appendix to the J. of Laws of 2003, no. 49, item 411 dated March 24th, 2003).

The external exam (organised once a year) consists of a written part (120 minutes) at school and a practical part (no less than 180 minutes and no more than 240 minutes) at an accredited examination institution. The Central Examination Board announces the date of the exam and prepares exam tasks. The exam is supervised by teams of teachers who do not participate in education (including at least one team from outside the school). The results of the exam are announced by the Regional Examination Board.

3.9 How are attainment levels specified?

The exam is deemed passed if the candidate receives at least 50% of points for the 1st part of the written exam, 30% of points for the 2nd part of the written exam, and 75% of points for a practical task.

3.10 What is the transferability of the qualification?

The exam confirming professional qualifications ensures that the qualifications are recognised in the whole country (state exam). At the request of the candidate, the Regional Examination Board issues a EUROPASS.

3.11 How permeable is the qualification?

The Polish system does not provide for a separate qualification system (division into partial qualifications). The professional qualification standard describes components of professional qualifications on the basis of which individual professional qualifications may be singled out (the works are pending). The components of qualifications often repeat in many similar professions (in the case of the bricklayer, those components are found also in professions such as stoneworker, concreter – steel fixer, painter - wallpaper worker).

3.12 How do qualifications take account of/ provide scope for innovations?

The date of verification of the qualification standard, core curriculum and examination standards has not been determined. However, the Ministry of Labour is going to verify the standards with the view to innovation in the near future (i.e. 5-6 years after the preparation thereof).

3.13 What are related qualifications?

Some qualifications of a concreter – steel fixer, painter – wallpaper worker, carpenter, stoneworker, monument building renovator, building structure assembler.

3.14 Is there an APL process in place?

In the case of the education of bricklayers (and other building professions), it is impossible to confirm the qualifications acquired in the work process. However, advanced work on the implementation of such a system - based not on professions but on qualifications (components of professional qualifications) - is pending.

3.15 What role does certification play?

The external vocational exam organised by the Regional Exam Commission (public body) is the main constructive element of the homogenous system of vocational education (formal public and private, IVET and CVET, and informally acquired skills confirmation). This exam is the only certification possible. Certification (state certificate) is the only way to confirm occupational qualifications and to have open access to a legal job.

3.16 Is the qualification changing?

Yes. It is assumed that the professional qualification standard system will be, from time to time, reviewed and changed upon consultation with sectoral partners. Currently, the professional qualifications are being singled out and grouped within the scope of building and similar professions. This will enable, among others, implementation of the APL certification.

IV. Knowledge, Skills, Competence

4.1 How is competence understood and what role does it play in qualifications, VET and in workplace/ labour market practice? e.g. task-based, occupational, procedural, social and personal competence

Competence is the capacity to use experience, knowledge and qualifications effectively. In standards of occupational qualifications, competence is defined by knowledge, skills and psycho-physical abilities. Based on expert opinion, it has to be stated that the English term “competency” does not have an unambiguous synonym in Polish (see description in 3.3 ‘general professional’ ‘occupational’ and ‘specialist’).

STANDARD OF PROFESSIONAL QUALIFICATION - BRICKLAYER

Extra-professional qualifications

Table 3. Assignment of extra-professional qualifications to professional qualifications levels

Level of professional qualifications	Extra-professional qualifications
SKILLS	
1	*)
2	<ul style="list-style-type: none"> – Adheres to the rules of occupational safety and hygiene, and of environment protection. – Provides pre-medical assistance to the injured in case of accident. – In case of fire, organizes rescue and extinguishing action until the arrival of the fire brigade. – Plans and implements own professional development path. – Improves own professional skills. – Applies teamwork rules. – Differentiates between jobs and positions on the basis of physical burden and psychophysical predispositions. – Introduces organizational solutions which improve work conditions and quality. – Conforms to orders of supervisors. – Reads employment-related documentation.
3	<ul style="list-style-type: none"> – Organizes workstation and manages the crew. – Determines staffing needs of the enterprise, and rules for personnel selection. – Influence appropriate employees’ attitudes. – Motivates him/herself and subordinate employees to work effectively and in a safe manner. – Foresees people’s attitudes and behaviours in stressful and dangerous situations. – Assertively reacts to the conflicts of interests between employees in a given team and in whole enterprise. – Prepares documents tied to setting up own business. – Prepares tax returns and social security (TUS) declarations. – Researches the labour market. – Uses in practice the knowledge on functioning of social mechanisms.

Level of professional qualifications	Extra-professional qualifications
4	*)
5	*)
KNOWLEDGE	
1	*)
2	<ul style="list-style-type: none"> – Regulations on occupational safety and hygiene and environment protection. – Rules and methods for providing pre-medical assistance to the injured in case of accident. – Fire prevention and protection regulations. – New technologies, materials, organizational solutions. – Technical conditions for execution and acceptance of works. – Teamwork. – Modern technical and organizational solutions improving working conditions. – Documents and regulations tied to employment.
3	<ul style="list-style-type: none"> – Requirements on the organization of construction and assembly works. – Duties of a supervisor in a construction enterprise or company. – Rules for selection of masons, plasterers and helpers to the team. – Motivates the team to work effectively and in a safe manner. – Work regulations and scopes of duties. – Market economy rules. – Obligations of business entity towards superior bodies, fiscal authorities, Social Security Board (TUS) and own employees.
4	*)
5	*)
PSYCHOPHYSICAL FEATURES	
1	*)
2	<ul style="list-style-type: none"> – Ready to help in emergencies. – Good eyesight and hearing. – Perceptiveness. – Quick reflex. – Self-control. – Passion for accuracy, order and tidiness. – Ability to concentrate attention. – Independence. – Persistence and patience. – Responsibility.
3	<ul style="list-style-type: none"> – Management abilities. – Imagination and creative thinking. – Objectivism and tolerance. – Ability to make quick and pertinent decisions. – Ability to cooperate. – Interest in technical issues.
4	*)
5	*)

*) *Not identified in the research.*

Specification of qualifications: general professional, occupational and specialist for the profession

NOTE: Qualifications at the higher level contain qualifications from lower levels

LEVEL 1

Not identified.

LEVEL 2

General professional qualifications

Skills

- Adheres to the regulations and rules for occupational safety.
- Provides first aid to the injured.
- Applies the handy fire extinguishing equipment and agents according to fire prevention and protection regulations.
- Adheres to the regulations and rules of environment protection.
- Wears protective clothing and personal protective equipment.
- Removes threats to the life and health of co-workers.
- Selects documentation needed to perform the works.
- Determines the location and scope of works.
- Uses instructions, attestations and safety certificates.
- Determines right angles using various methods.
- Reads the construction documentation and uses it.
- Performs the necessary calculations, drawings and auxiliary drafts.
- Organizes the workstation.
- Applies materials in line with technical documentation.
- Selects appropriate tools and equipment for masonry works.
- Uses the tools and masonry equipment according to their designation and occupational safety and hygiene rules.

Knowledge

- Fire threats and rules for fire prevention and protection.
- First aid in emergencies.
- Environment protection at the workplace.
- Protective clothing and personal protective equipment.
- Rules of occupational safety and hygiene, and of fire protection, during the use of tools, mechanical and electrical devices.
- Instructions for using power tools.
- Architectural and construction drawings.
- Rules for creating documentation.
- Markings on construction drawings.
- Rules for making working drawings.
- Basics of engineering drawing.
- Basic measuring equipment and tools.
- Control of proper staking out of the building's construction elements.
- Loads in construction.
- Grades of reinforcing steel.
- Rules for making formworks for construction elements.
- Technical conditions for execution and acceptance of masonry works.
- Organization of the construction site.
- Hygienic and sanitary requirements for employee rooms and warehouse spaces.
- Conditions for planning of the construction site.
- Knowledge of transport means, manual and mechanized.

Psychophysical features

- Distinguishing of colours.
- Sight and movement coordination.
- Dexterity.
- Ability to work under monotonous conditions.
- Balance.
- Ability to work under adverse weather conditions.
- Accuracy.
- Self-control.

Occupational qualifications

Skills

- Applies occupational safety and hygiene rules at the mason's position (Q-1, Q-2, Q-3).
- Reads the technical description (Q-1, Q-2, Q-4).
- Reads the architectural and construction design (Q-1).
- Reads working drawings (Q-1, Q-2, Q-4).
- Selects materials to make mortar and concrete (Q-4).
- Proportions the ingredients by volume, by weight or combining the weight and volume methods (Q-4).
- Determines the consistency and workability of fresh mortar (Q-4).
- Mixes mortar according to working recipe (Q-4).
- Uses the mortar and concrete mixes according to their designation (Q-4).
- Selects appropriate scaffolding for the work to be done (Q-4).
- Determines the suitability of materials to make scaffolding (Q-4).
- Assembles metal scaffoldings from prefabricated elements (Q-4).
- Checks the correctness of assembly (Q-4).
- Fixes batter boards (Q-4).
- Stakes out the placement of basic construction elements of the building, according to the architectural design (Q-1, Q-3).
- Selects materials to execute the individual construction elements (Q-1, Q-2, Q-3, Q-5).
- Builds brickwork walls from elements of varying thickness (Q-1, Q-2).
- Makes common bonds (Q-1, Q-2).
- Makes cross bonds (Q-1, Q-2).
- Makes bonds of bricks in walls which intersect at a right angle (Q-1, Q-2).
- Makes brick bonds in posts and pillars (Q-1, Q-3).
- Builds brickwork walls from perforated and chequer bricks (Q-1, Q-2).
- Applies occupational safety and hygiene rules at the mason's position (Q-1, Q-2, Q-3).
- Reads the technical description (Q-1, Q-2, Q-4).
- Reads the architectural and construction design (Q-1).
- Reads working drawings (Q-1, Q-2, Q-4).
- Selects materials to make mortar and concrete (Q-4).
- Proportions the ingredients by volume, by weight or combining the weight and volume methods (Q-4).
- Determines the consistency and workability of fresh mortar (Q-4).
- Mixes mortar according to working recipe (Q-4).
- Uses the mortar and concrete mixes according to their designation (Q-4).
- Selects appropriate scaffolding for the work to be done (Q-4).
- Determines the suitability of materials to make scaffolding (Q-4).
- Assembles metal scaffoldings from prefabricated elements (Q-4).
- Checks the correctness of assembly (Q-4).
- Fixes batter boards (Q-4).
- Stakes out the placement of basic construction elements of the building, according to the architectural design (Q-1, Q-3).
- Selects materials to execute the individual construction elements (Q-1, Q-2, Q-3, Q-5).
- Builds brickwork walls from elements of varying thickness (Q-1, Q-2).
- Applies common bonds (Q-1, Q-2).
- Applies cross bonds (Q-1, Q-2).
- Applies bonds of bricks in walls which intersect at a right angle (Q-1, Q-2).
- Applies brick bonds in posts and pillars (Q-1, Q-3).
- Builds brickwork walls from perforated and chequer bricks (Q-1, Q-2).
- Builds walls from aerated concrete masonry units (Q-1, Q-2).
- Builds walls from hollow blocks and concrete blocks (Q-1).
- Erects walls with horizontal and vertical reinforcements (Q-3).
- Builds free-standing chimneys from bricks, hollow blocks and concrete blocks, and from ceramic products (Q-1).

- Erect walls with smoke, fumes and ventilation ducts (Q-1).
- Makes ducts from prefabricated elements (Q-1).
- Makes house drains (Q-1).
- Makes flat lintels (Q-3).
- Installs prefabricated lintels of the L type (Q-3).
- Makes masonry floorings (Q-3).
- Makes lintels and floors with steel joists and brick infill (Q-3).
- Makes formwork for lintels and flooring (Q-3).
- Builds vaults (Q-3).
- Prepares the reinforcement according to design (Q-3).
- Fits horizontal damp proof insulation in basement buildings (Q-5).
- Fits horizontal damp proof insulation in slab-on-grade buildings (Q-5).
- Fits vertical damp proof insulation in foundation and basement walls (Q-5).
- Determines the manner for fitting joinery and selects appropriate materials (Q-5).
- Mounts wooden door and window frames (Q-5).
- Mounts metal door and window frames (Q-5).
- Mounts window grates, railings and other similar elements (Q-5).
- Builds cavity walls and multi-layer walls (Q-1).
- Lays bricks in multi-layer walls, adhering to bonding rules (Q-1, Q-2).
- Bonds the inner leaf of the wall with the outer leaf (Q-1, Q-5).
- Prepares base for partition walls (Q-2).
- Erects partition walls, ½ and ¼ brick thick (Q-2).
- Bonds partition walls to load-bearing walls (Q-1, Q-2).
- Erects partition walls from aerated concrete blocks, 6 and 12 cm thick (Q-2).
- Mount door frames in partition walls (Q-2).
- Erects partition walls from Pro-Monta gypsum boards (Q-2).
- Prepares base for external brick cladding (Q-5).
- Clads with natural stone (Q-5).
- Organizes the mason's workstation (Q-4).
- Assesses the correctness of brick bonds in the wall (Q-1, Q-2).
- Checks the vertical and horizontal alignment during various phases of masonry works (Q-1, Q-2, Q-3).

Knowledge

- Threats associated with the mason's position (Q-1, Q-2, Q-3).
- Occupational safety and hygiene rules at the workstation and in mason's profession (Q-1, Q-2, Q-3).
- Types of construction binders and aggregates (Q-4).
- Rules for dosage and mixing of ingredients (Q-4).
- Properties of mortars and concrete (Q-4).
- Processes of bonding and hardening (Q-4).
- Knowledge of norms, standards, instructions and recipes (Q-4).
- Types of scaffolding for masonry works (Q-4).
- Rules for assembling and fastening the scaffolding (Q-4).
- Technical conditions for assembly and acceptance of scaffolding (Q-4).
- Masonry materials (Q-4).
- Types of masonry mortars (Q-4).
- Rules for bonding bricks in walls (Q-1, Q-2).
- Types of lintels, vaults and flooring (Q-3).
- Construction of and rules for reinforcing lintels, vaults and floorings (Q-3).
- Types of insulation materials (Q-5).
- Rules for insulating construction elements (Q-5).
- Assessment of insulation works quality (Q-5).
- Methods and manners for fitting wood and metal joinery (Q-1, Q-2).
- Rules for the performance of a multi-layer wall (Q-1).
- Conditions for performing masonry works during the period of low ambient temperatures (Q-1, Q-

2).

- Materials used for cladding (Q-5).
- Rules for fixing cladding to the base (Q-5).
- Quantity survey of masonry works (Q-1, Q-4).
- Manual and mechanized transport means in the masonry profession (Q-4).
- Basics of wall performance (Q-1, Q-2).
- Norms for the thickness of brickwork joints (Q-1, Q-2).

Psychophysical features

- Interest in technical issues (Q-1, Q-3).
- Balance (Q-1, Q-3).
- Resistance to prolonged physical effort (Q-1, Q-2, Q-3, Q-4).
- Ability to work at heights (Q-1, Q-2, Q-3, Q-5).

Specialist qualifications

Skills

- Makes bonds of bricks in walls which intersect angles other than the right angle (Q-1, Q-2).
- Applies Polish („gothic") brick bond (Q-1).
- Applies multi-layered bonds (Q-1).
- Builds walls from natural stone (Q-1).
- Builds arched vaults (Q-3).
- Builds composite vaults (Q-3).

Knowledge

- Smoke, fumes and ventilation ducts (Q-1, Q-2).
- Knowledge of construction materials, solid and perforated, for building walls with ducts (Q-1, Q-2).
- Conditions that free-standing chimneys must comply with (Q-1, Q-2).
- Arched and composite vaults (Q-3).

Psychophysical features

- Not identified.

LEVEL 3

General professional qualifications

Skills

- Signs contracts with subcontractors.
- Performs take-offs.
- Prepares work schedule.
- Performs as-built quantity surveying, to perform valuation of the work executed.
- Marks the construction site according to the current regulations on occupational safety and hygiene, fire protection and prevention, secures it against trespassing by third parties.
- Trains co-workers on the regulations on occupational safety and hygiene, fire protection and prevention.
- Marks dangerous locations at the construction site and workstation.
- Provides employee rest rooms.
- Assures the supply of water and power in case of lack of water supply and power network.
- Provides materials necessary to execute the works.
- Stores construction materials, following the regulations on occupational safety and hygiene, fire protection and prevention.
- Selects and installs machines and equipment to execute specific works.
- Reads documents regulating issues of employment and business activity.
- Identifies and analyses information regarding requirements of employee(employer).
- Prepares documents tied to employment and business activity.

Knowledge

- Rules for drawing contracts for construction works.
- Rules for making take-offs and as-built surveys.
- Basics of legal labour protection.
- Rules for storage of materials, following the regulations on occupational safety and hygiene.
- Knowledge of construction equipment and machinery.
- Tax regulations related to construction activity.
- Legislation regulating issues of construction activity.

Psychophysical features

- Ability to switch from one activity to another.
- Ease of expressing opinions.
- Logical thinking ability.
- Imagination and creative thinking ability.
- Independence.
- Emotional resistance.
- Stereoscopic vision.
- Technical talents.

Occupational qualifications

Skills

- Verifies the completion of masonry works against project documentation and relevant regulations (Q-1, Q-2, Q-3).
- Checks the admissible deviation from the designed horizontal dimensions of rooms and the whole building (Q-1).
- Checks the admissible deviation from the designed vertical dimensions of rooms and the whole building (Q-1).
- Checks deviations in the thickness of walls, deviations from vertical and horizontal orientation of the building's elements (Q-1, Q-2, Q-3).
- Determines the building's axes (Q-1, Q-4).
- Stabilizes measuring points in field (Q-4).

Knowledge

- Technical conditions for execution and acceptance of masonry works (Q-1, Q-2, Q-3, Q-4).
- Values of admissible vertical and horizontal deviations of rooms and the building from the design (Q-1).
- Admissible deviations from the designed dimensions of rooms and the whole building (Q-1).
- Types of surveys (Q-1, Q-4).

Psychophysical features

- *Not identified.*

Specialist qualifications

- Not identified.

LEVEL 4

- *Not identified.*

LEVEL 5

- *Not identified.*

4.2 How is knowledge understood, and what is the significance of knowledge to competence? e.g. theoretical, practical, occupational, industrial

Knowledge is a constituent element of competence. In the Oxford dictionary it is defined as expertise, and skills acquired by a person through experience or education; the theoretical or

practical understanding of a subject. But in Polish VET, knowledge is practically defined only by expertise (theory) not by 'skills' which is a separate term.

4.3 How are skills understood, and what is the significance of skills to competence?

Skills are defined as ability to perform the task. Competence is sometimes defined as the sum of skills.

4.4 What is the extent of integration of knowledge, skills and competence and what is the main learning place/location of each?

Knowledge – school

Skills - school, workshop, work site

Competence – in common opinion the main learning place is worksite as final point of integration of knowledge and skills supported by work experience. But, paradoxically, formal confirmation of competences is ex ante by external exam – formal qualification

4.5 What are the processes for achieving and assessing competence and its components?

Formal definition through external exam.

4.7 Are there practical skill tests? What form do these take?

Yes. During the external exam. Requirements described above.

4.8 What criterion for competence are applied (e.g. particular bonds, arches etc)?

One task defined by Central/Regional Exams Commission

V. Utilisation of labour

5.1 What is the understanding/ definition of

- **the 'sector';**
There is no common definition of the sector. A sector may be construction as defined in NACE (F). Most frequently, the entire range of building materials and product manufacture industry, construction services (which also include road, water construction industry, etc), residential and other building maintenance and use are referred to as the sector. With respect to the construction industry, the term "branch" is also used referring to government administrative units.
- **the 'occupation';** Occupation is understood as a set of tasks isolated as a result of social division of work and requiring suitable qualifications from an employee (skills, knowledge, psycho-physical features) In relation to bricklaying, the occupation is formally connected with the standard of mason/bricklayer (formal description). It is certified via external exam and recognised by employers according to the vocational diploma, which is a condition for employment in the post of 'bricklayer' and connected with the level of the wage. In the Polish language 'occupation' and 'trade are described by one word 'zawód'. Colloquially bricklaying as a 'trade' is an occupation usually performed by a worker. Bricklaying as a job is a concrete position on an actual building site.
- **the 'trade'; see above:** There is no official definition. It is at the same time the type of the activity and determining a group of professions practiced within the scope thereof.
- **the 'job'?:** The term has a functional meaning and refers to a specific workplace and practiced profession (irrespective of the education). In principle, in Polish, the terms

‘occupation’ and ‘job’ are not distinguished. There is a distinction between the profession acquired and the profession practiced.

5.2 What are the scopes and types of activities bricklayers fulfil in the workplace?

In the mason's profession, there are positions which are typical: mason, supervisor, plasterer; and assistant positions: mason's helper, steel fitter, construction carpenter, concreter, site manager, building control inspector, land surveyor, stonemason, floor fitter and tiler. VET for masons does not cover all these areas of activity. Some parts of the qualifications and tasks are the same. Mason/bricklayer is the most universal/horizontal profession in the construction sector at levels II and III.

Professional tasks performed by the mason are broken down into three categories:

- masonry works,
- plastering works,
- finishing works.

The above categories of works include a number of activities performed by the mason or the helper, most of which is done manually. Mechanized works usually apply to the mixing of mortar and delivering it to place of work. Work frequently takes place on scaffolding, both indoors and outdoors. For security reasons, during work it is required to focus attention and follow the occupational safety and hygiene rules of the construction industry. Other activities - to do with planning, monitoring and delivering the work; putting in place health and safety and environmental measures, etc. - only apply on a limited scale (see standard description). These activities are connected more with the building technician occupation (level III-IV)

5.3 What sectors of activity (housebuilding, commercial, repair and maintenance) are they involved in? As above and restoration

5.4 What is the degree of specialisation?

Very small in small and medium size companies, but high in large companies. It depends on the scope of company activity. In small firms bricklayers are universal workers. In big companies, activity is more limited to ‘core’ mason/bricklayer tasks (see standard ‘occupational qualifications’ - skills or even part of them)

5.5 What are the available routes for progression?

Formal CVET, higher education (after supplementary education and matura exam), and education through the labour market (upgrading courses, tutorship courses). In the apprenticeship path it is possible to pass a masters exam and acquire a guild master title (Union of Crafts)

5.6 How mobile is the workforce?

Very mobile as migrant workers and internally (within companies and individually), moving from building site to building site all over the country and between companies.

5.7 What is the extent of migrant labour used? Where do migrants come from? In which areas are they employed?

Third countries migrants are present and important for the industry, but... illegal. There are approximately 35,000 legal migrants from ‘third countries’ a year in Poland alone. The estimated number of unregistered workers in the construction industry is about 120,000 (of which about one-fifth are qualified bricklayers). The majority of migrants come from Ukraine, Belarussia, Armenia, Pakistan, Kazakstan.

5.8 What related occupations are there? Do bricklayers ever fulfil some of the work involved?

As above.

5.9 What is the process of entry/recruitment/access to the occupation?

For VET selection tends to be negative (this occupation is recognised as dangerous, not attractive, with limited paths for further development). Recruitment for jobs: through companies own recruitment, public labour services (labour offices), private agencies (recruitment abroad)

5.10 What health and safety risks are associated with bricklaying?

The same as in other EU countries. There is no compensation for health risk for bricklayers in the wage or pension schemes in Poland.

5.11 What is the usual type of employer?

Statistics confirm approximately 200,000 active construction enterprises in Poland in 2007. Only 6-7% of these have more than 9 employees. The rest of economical subject in the construction sector are self-employed persons approximately 180,000 in 2007. Only 100-120 enterprises registered in Poland have an income over 10 000 000 PLN (c. 2 500 000 EURO) per annum. With large investments there are only 8-12 big enterprises ready to be main contractors (but in the majority of infrastructural investments/tenders there are only consortiums). The main type of employer is subcontracting company, usually general building. No separate bricklaying firms. The majority of bricklayers are employed in SMEs.

5.12 What employment status do bricklayers have (e.g. self-employed, agency, temporary)

No detailed data is available concerning the bricklayer profession. Self employment is rife and very often bogus. Main status: full time employment, but usually for a limited time period (temporary), and self-employed.

5.13 What tools and equipment are required to be used by the bricklayer? Who provides these?

Usual for bricklayer (mixer, hammers, cord, profiles, joint filler, trowels, spirit level, folding rule etc) and similar occupations ('glue' technology has not been developed). For those employed (full and temporary), the employer is obliged to provide tools and equipment. Self-employed bricklayers provide equipment themselves (or partially themselves).

5.14 What changes are observable in the occupation and the activities involved, including regarding technology and work organisation?

High 'speed' of construction process and changes in building site organisation, new technologies ('glue'), need to broaden vocational qualifications over the occupational framework.

VI. Currency of qualification

6.1 What is the status of bricklaying in the occupation/ the sector/ society?

In the sector bricklaying is the key occupation and the status is high (but this depends mainly on personal experience). In society the status is relatively low as for the whole sector.

6.2 What is the value of qualifications/ skills on the labour market?

Despite the rather low social status of the occupation, the value of the bricklayers' qualification on the labour market is high due to labour shortages and employers' requirements. The qualification/vocational diploma is a formal condition for labour market

entry in a company (formal employment, level of wage etc). But it is not a precondition to being a self-employed bricklayer

6.3 What value does the qualification have for entry to further/higher education?

For graduates of the external vocational exam, there is the possibility to acquire further levels of education (supplementary technical school or supplementary general secondary school) and, after this, the matura exam. It is the way to higher education.

6.4 How important is the bricklayer as an occupation in the sector?

The bricklaying occupation is key, the most important occupation for the sector, the most universal, most 'wanted' by employers. Usually it is the first choice of students in building schools. With the bricklayer diploma you can start own economic activity easier (small firm, self-employment) and you can expand your further qualifications easier.

6.5 What are the proportions of workers holding the qualification?

No statistical data. In the opinion of the social partners, bricklayers are a third to a half of skilled workers in the industry. Most bricklayers have the diploma (probably almost all in medium and bigger companies).

6.7 Is there a link between qualifications/skills and pay?

This link is defined by company regulations and company collective agreements (if these exist). It depends on the level of qualifications and also on work experience. In Poland, there is no commonly applicable (generally binding) inter-company collective agreement for the construction industry. The diploma is formally a precondition for employment as bricklayer in company.

6.8 What performance criteria/efficiency indicators are applied?

Various. Depends on company size, experience, sub-sector.

6.9 What is the basis of the wage for bricklayers paid (e.g. output/performance, time)?

Usually time supplemented by output results (separate parts of the wage)

6.10 What is the average weekly earning of the bricklayer? How does this compare with related skilled occupations in the sector (e.g. carpenter)?

The wage is calculated usually on a monthly basis. It depends on region (higher in big cities, lower in Eastern - near border regions). Average gross monthly wage in medium and bigger companies is app. 3200 PLN (app. 730 EURO) but it may be over 4400 PLN (1000 EURO).

6.11 Is there a graded wage structure?

Yes. It depends on company policy.

6.12 Are there any labour rights associated with the qualification?

Not directly. It depends on company policy.

6.13 Are there changes in the currency of the qualification?

The status of the profession is higher than 10-15 years ago due to higher wages, large-scale migration and shortages on the labour market.