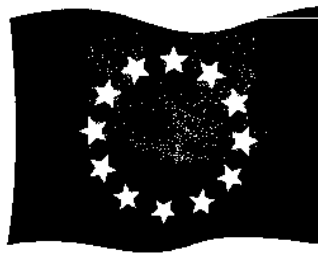


EUROPE AND US



New Europe for me as

PLUMBER

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Using example of EUROFIT Austria

1 STRUCTURE DATA OF THE PLUMBER PROFESSION

1.1 Structure data of XXXXX plumber profession

In the work of plumbers are some overlaps with activities of other crafts, particularly to those of roofers, installers and the master carpenters. Overlaps are mainly in the field of heat and acoustic insulation. Many enterprises have two or even more authorizations adequate to the profession. Due to considerable overlapping of the plumber activities it is quite difficult to get statistical data of this profession.

Development of the number of plumber and roofer enterprises in XXXX in the years 2000 – 2002 was as following:

	<u>Enterprises</u>				
	1995	2000	2002	95/00 %	00/02 %
Plumber, coppersmiths					
Roofer, pavior					

Number of plumbers rises / declines

From the year 1995 to 2000 rose/declined the number of total employees in the plumber profession about xx%, and in the last years it has risen/declined about xx%. In year 2000 were employed in this profession approximately XXXX employees.

No change tendencies of branch structure foreseen

The average company size of plumber's enterprise is x employees. To compare this indicator with some other EU countries is difficult because plumbers in e.g. Germany or Switzerland are statistically in one group with installers. The branch associations have neither relevant structure data. According to these facts we can assume, that companies in other EU member countries are likely of the same company size, what is not surprising, because 90% of all enterprises in the EU have less than 10 employees, and only approximately 1% of all enterprises have more than 500 employees. One Swiss research shows that enterprises with the best economic results are enterprises with 6-9 employees and enterprises with more than ca 20 employees. The branch structure itself is not necessary to be changed.

The above-mentioned problem of overlapping activities causes that it is difficult to determine a relevant market share of this profession. The restoration activities make a big part of the plumber profession performance.

The plumbers' orders are situated in almost 90% in local area up to 50 km away from the particular enterprise, orders in the area up to 200 km are quite seldom and orders abroad are more or less just the exception from the rule. In addition, many plumber enterprises are established in small towns with less than 10.000 inhabitants. This only underlines the typical features of this

craft, namely that the plumbers are active mainly in the regional environment close to their customers and that they utilize their small company size to be flexible by matching customer needs what assure them sufficient market potential, workload and turnover. Regional differences in construction culture and different demands according to climate zones even within the separate European countries will affect undoubtedly also in future the specific professional training and practical exercise of this profession and will more likely hinder interregional activity.

The biggest problems for companies are an average share of own capital and insufficient profits. One of possible reasons responsible for this situation can be particular weakness in the area of material economy and calculation. New technological developments with increased capital requirements and lack of skilled labor will be likely the most considerable problems for xxxxxx plumbers in the future.

**Main
problems
are own
assets share
and low
profit rates**

1.2 Wage costs comparison within the Europe

More and more entrepreneurs ask the same question, namely – how will integration of the markets influence the development of performance flows over the border. Fear from the new competition is more intensive in particular areas of activities. However, the expectations and hopes of better chances, achievable faster in the neighboring or another EU member country, become more clearly. These fears and hopes initiate discussions about the competitiveness of the affected branches. Therefore the International union of roofing and plumbing constructors in Paris has begun to compile regular studies concerning the development of the most important expenses in the house technology branch.

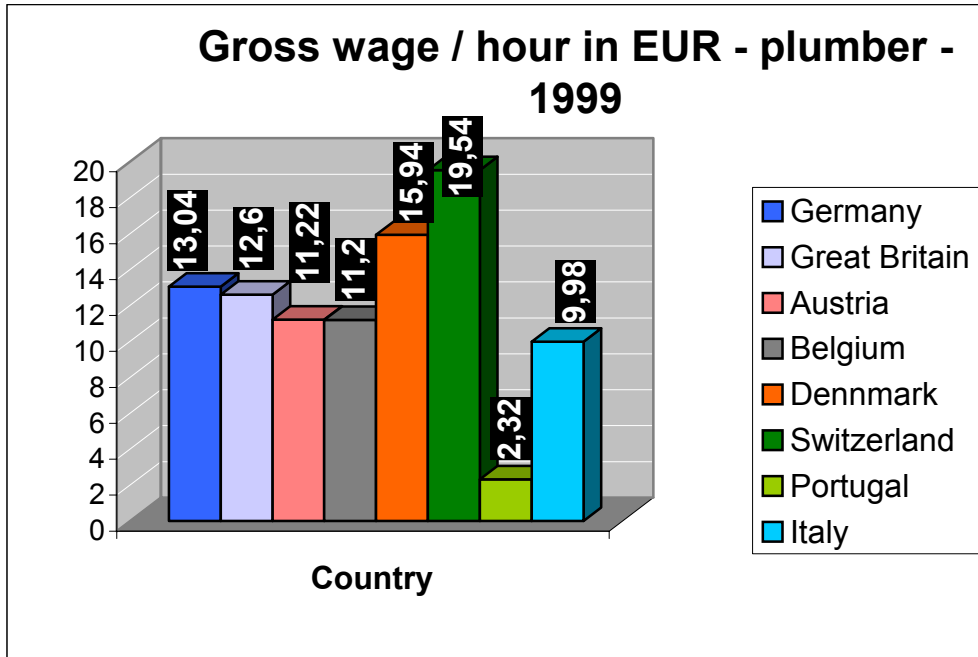
One of the most significant expenses is labor and social costs. Their development in some European countries in the year 1999 is charted in the following graphs. The figures are summarized for plumber and also for the sanitary plumber crafts, however, other figures are not available at the moment. Nevertheless, these graphs show at least tendencies for the cross border activities of plumber, sanitary installation, heating and air condition installation crafts and enterprises.

This wage comparison can give a picture what wage entrepreneurs in these countries fundamentally pay for one working hour to a qualified, approx. 30 years old plumber by the execution of his work to the customer.

Graph 1 demonstrates that the differences in gross wage per hour within Europe are still very high. Denmark and Switzerland have much higher wages as it is for example in Italy and Portugal or in our country, where it is xx EUR. However, some gross wage amounts are to be valued with caution: for the more precise comparison it is essential to have a look at the graph 3 with total labor expenses.

GRAF 1

Gross wage comparison within Europe

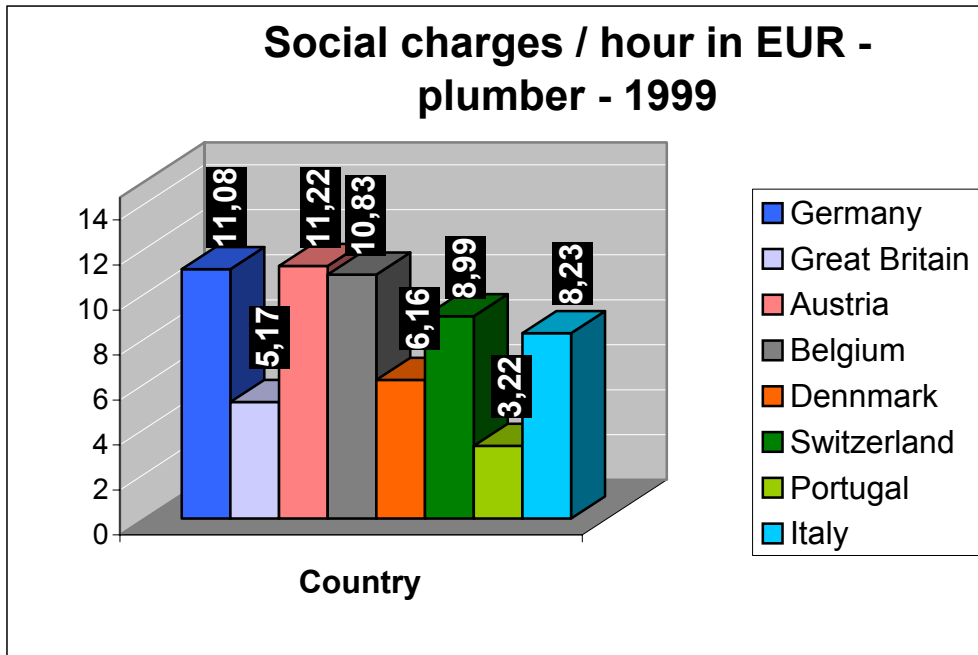


Source: INTERNATIONAL UNION OF ROOFING AND PLUMBING CONTRACTORS - GCI-UICP

The following graph 2 presents the social costs in EUR per one hour and one plumber in some European countries in year 1999.

GRAF 2

Comparison of social expenses

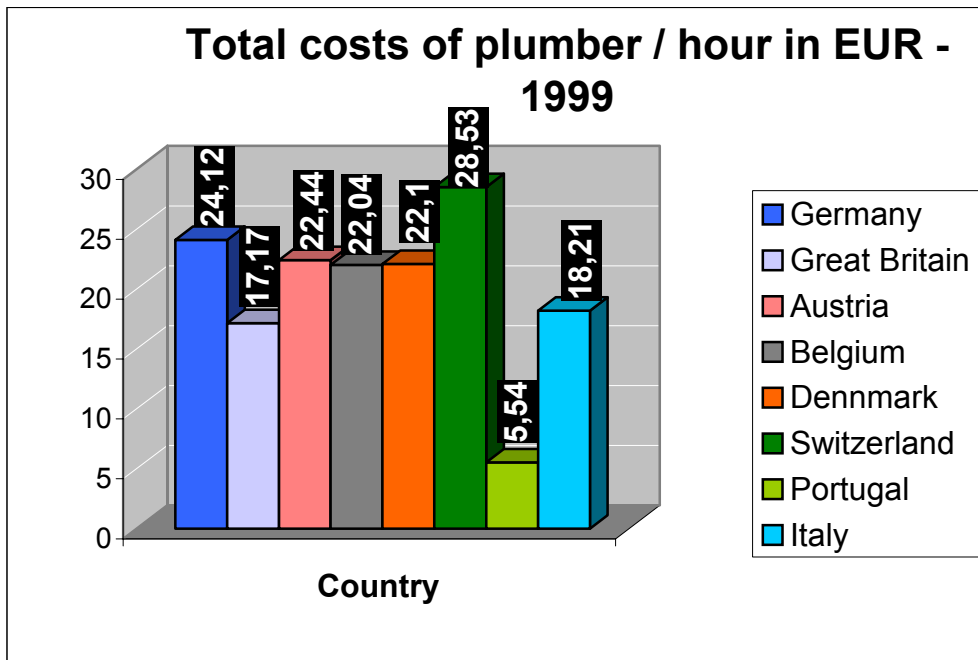


Source: INTERNATIONAL UNION OF ROOFING AND PLUMBING CONTRACTORS - GCI-UICP

Graph 3 can give more precise information especially for the plumber enterprise or craft about real personal costs than the comparison of gross wage that is more interesting for the plumber himself. Total labor costs mirror the differences in social expenses.

GRAF 3

Total labour costs comparison within Europe

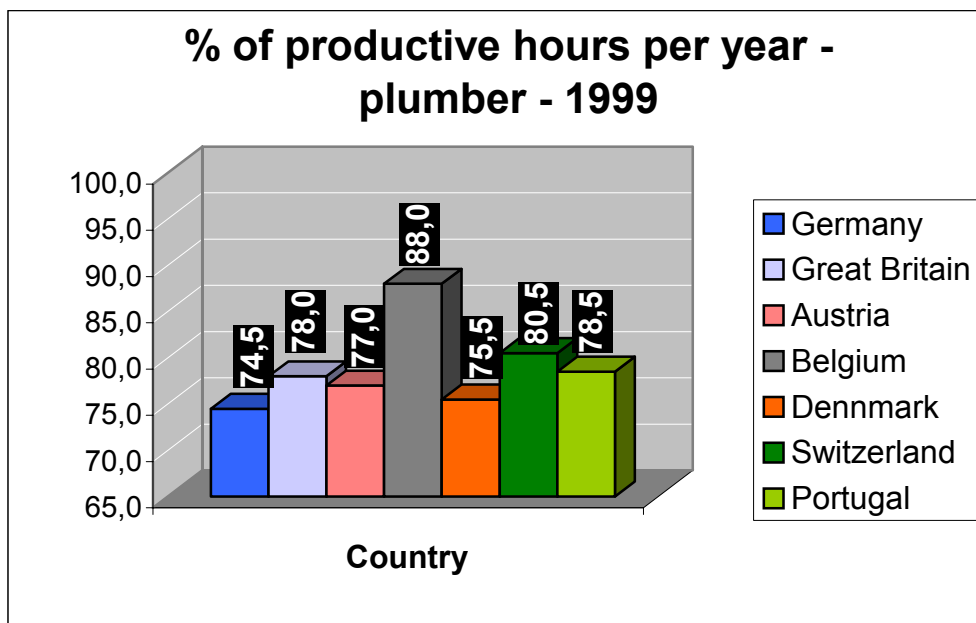


Source: INTERNATIONAL UNION OF ROOFING AND PLUMBING CONTRACTORS - GCI-UICP

The last graph 4 informs about approximate % of effective hours in the year 1999. It ranges from 74,5% in Germany to 88,0% in Belgium.

GRAF 4

% of effective hours per year



Source: INTERNATIONAL UNION OF ROOFING AND PLUMBING CONTRACTORS - GCI-UICP

2 EFFECTS OF THE EU ENTRY ON THE PLUMBER CRAFT

2.1 Free movement of goods

Standards and regulations for plumbers

What are standards, and what do they bring to the plumber?

Standards are qualified recommendations

Standards are not obstacles that have to be faced by entrepreneurs. They are qualified recommendations that can be voluntarily followed by entrepreneurs.

Their special sense lies in an essential step forward the legal certainty: the **xxxxx** law givers and public contracting bodies consider standards more and more in the technical issues. Standards can also become a content of contract if it is agreed by contracting partners.

Standards are accessible for everybody and they form the presupposition for the fulfilment of technical and economic tasks: as norm definitions; requirements; quality, security and test criteria at national level (**xxxx**), European level (EN) and world-wide level (ISO):

International standards are compiled by the world standards organization ISO (International Organization for Standardization) and have not to be applied as national standards.

International standards

Important international quality management standards are ISO series 9000 to 9004. They were elaborated on account of world-wide trend of high customer requirements regarding quality and they should guarantee the fulfilment of customer expectations, that he get supplied what he ordered and paid, namely in arranged, assumed and perfect quality.

Result of the application of standard series 9000 - 9004 should be a quality management system that contains elements specific for each considered enterprise.

More and more contracting partners within Europe insist on existence of a quality manual in the enterprise as a presupposition for a completion of the contract.

National standards are technical rules that demonstrate "science and technology level as well as the economic development".

National standards

They are not enacted "from above", but exactly those who will apply them prepare them: entrepreneurs, science representatives, public authorities and consumers. These people prove in the so-called specialized standards committee whether there is real need for new standardization and then they prepare appropriate standards for these needs.

European standards (EN) are results of consensus in CEN (European standardization committee) by delegates of the national standardization institutes from the EU and EFTA countries and afterwards they are valid as national standards in every EU member state. They shall be implemented in **xxxxxxx**. In the CEN are all member countries basically equal. Separate CEN members have weighted voices by a voting procedure, according to their population figures.

European standards

European standards are elaborated by the so-called technical committees (TCs) of the CEN, only if

- there exists a real need for it and
- there either still does not exist such international standard or is not in preparation.

In these TCs cooperate representatives from the respective expert groups from national standardization bodies. National standards must be withdrawn if they contradict European standards to guarantee as much as possible harmonization of standards.

European standards can be substantial supplement of EU directives: the latest EU directives set only fundamental requirements that must be fulfilled by all products launched to the market. These fundamental requirements can be

closely specified by European standards. Then if the plumber does not work according to these standards, he must prove that his products / services, correspond to the EU directives (evidence of conformity).

European standards serve not only to reduction or removal of trade obstacles for all EU member states, but among other things also to health security and protection. Although the number of European standards will considerably increase in the next years, there will remain furthermore a need of specific national standards.

Following European standards (and **xxxx** standards – **must be added**) and standard drafts are important for the plumber profession (some further standards concerning overlapping activities of another profession with the plumber profession can be relevant too):

**Important
European
standards for
plumbers**

EN 501:1994

Roofing products from metal sheet - Specification for fully supported roofing products of zinc sheet

EN 502:1999

Roofing products from metal sheet - Specification for fully supported roofing products of stainless steel sheet

EN 504:1999

Roofing products from metal sheet - Specification for fully supported roofing products of copper sheet

EN 505:1999

Roofing products from metal sheet - Specification for fully supported roofing products of steel sheet

EN 506:2000

Roofing products from metal sheet - Specification for self-supporting products of copper or zinc sheet

EN 507:1999

Roofing products from metal sheet - Specification for fully supported roofing products of aluminium sheet

EN 508-1:2000

Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 1: Steel

EN 508-2:2000

Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 2: Aluminium

EN 508-3:2000

Roofing products from metal sheet - Specification for self-supporting products of steel, aluminium or stainless steel sheet - Part 3: Stainless steel

EN 516:1995

Prefabricated accessories for roofing - Installations for roof access – Walkways, treads and steps

EN 517:1995

Prefabricated accessories for roofing - Roof safety hooks

EN 1013-2:1998

Light transmitting profiled plastic sheeting for single skin roofing - Part 2: Specific requirements and test methods for sheets of glass fibre reinforced polyester resin (GRP)

EN 1013-3:1997

Light transmitting profiled plastic sheeting for single skin roofing - Part 3: Specific requirements and test methods for sheets of polyvinyl chloride (PVC)

EN 1013-4:2000

Light transmitting profiled plastic sheeting for single skin roofing - Part 4: Specific requirements, test methods and performance of polycarbonate (PC) sheets

EN 1013-5:2000

Light transmitting profiled plastic sheeting for single skin roofing - Part 5: Specific requirements, test methods and performance of polymethylmethacrylate (PMMA) sheets

EN 607:1995

Eaves gutters and fittings made of PVC-U - Definitions, requirements and testing

EN 612:1996

Eaves, gutters and rainwater down-pipes of metal sheet - Definitions, classifications and requirements

German Institute for Standardization 17 162 part 1

Flat steel products; hot-dip zinc coated strip

German Institute for Standardization 52 141

Glass fibre fleece as layer for roof and waterproof sheeting; definition, designation, requirements

Further extensive standardized areas of activities are in Germany: sheet steels and steel bands, steel profiles, plumber's workshops, pipe layer's profession, house and ground drainage.

Construction directive / CE Marking

Construction directive

The **Construction Products Directive** applies to any construction product, which is produced for incorporation in a permanent manner in construction works including both building and civil engineering works. All these products must meet the essential requirements of the relevant Directive to be eligible for 'CE marking' and then to be placed on the market anywhere within the European Union. 'CE marking' for construction products is obligatory since 1.1.1995.

Which essential performance criteria does this directive lay on the construction products?

- Mechanical strength and stability
- Health and environmental protection
- Energy savings and heat insulation.

However, the basic documents to all these fields are still missing.

CE 'CE marking' proves that:

CE Marking

- Products are manufactured in compliance with harmonized European standards OR
- There is the European Technical Approval for the manufacturing of these products OR
- Products are manufactured in compliance with recognized national standard.

In addition to meeting the technical requirements, in order to comply with the Directive products must meet certain administrative requirements. These are:

Declaration of conformity

1. **Control of series production:** the manufacturer must be able to demonstrate that their production methods will result in consistent product. Clearly manufacturers who already operate a quality control system that has been recognised to a national standard such as ISO9000 will easily be able to meet this requirement, but ISO 9000 approval is not necessarily a pre-requisite for complying with the Directive.
2. **Completion of a Declaration of Conformity;** the manufacturer declares that their product meets the requirements of the Directive. This document must contain some details of how the manufacturer justifies their claim of compliance and must be kept for 10 years from the date of its creation.

2.2 The free movement of people

Entrepreneurs as well as employees are considered; key words are freedom of establishment and liberalization of the labor market.

Freedom of establishment

Freedom of establishment means not freedom of qualification, but freedom from discrimination. Freedom of establishment means labor mobility for self-employed and for legal bodies and the right of profession exercise respectively of the free enterprise establishment within the whole EU.

The EU member states are by no means obliged to enact the identical legal rules and regulations on the spot of establishment. However, they have resolved that they will apply the same legal system on the citizens of the other member states as they apply on their own citizens.

The regulations regarding occupational access in the various EU member states are so different, that the harmonization in this field is not foreseen also in the future. Therefore, the EU in order to realize and to enable the freedom of establishment managed this by so-called "Liberalization directives. These directives restrict to the removal of discrimination existing in the member states. They clearly determine that a certain time of the practical experience in the particular profession on the self-employment basis will be acknowledged as a substitute for a required certificate of competency in the host country.

These transition directives also effect the plumber's profession. Particularly this means that a continuous six years long experience on an self-employment basis or in managing position in another EU member country – as the main case – is recognized as a sufficient certificate of competence. The authorization for the particular craft profession will be issued after submitting of this proof and then it is realized in shorter and less complicated procedure.

These regulations have been developed within the EU since more than 25 years. However, they have led to the movements only in a quite restricted amount. For the illustration: only **0.3%** of craft start-ups in Germany were established by craftsmen coming from another EU member state, and the majority of them were from neighboring countries as e.g. the Netherlands, France or Belgium. When we turn this percentage into the increase of the number of enterprises, e.g. for the local plumber's profession, we will realize that there will be nearly no movement of foreign crafts into our country. This means that crafts in the EU are as well almost exclusively active in the restricted regional markets.

Freedom of establishment for self-employed and legal persons

6 years experience on self-employed basis recognised as sufficient certificate of competence

Almost no migration to our country

Free movement of employees – labor mobility (wage situation, mobility willingness)

It is a right of all EU citizens to run business on the self-employment basis in any other EU member state and with this related the right to purchase estate or land as well as the right on free access to educational facilities in all EU member states. With this is also connected the mutual recognition of certificates, profession trainings and certificates of competence. Employees from other EU member state are liable to the same legal, social and tax-privileges like native citizens. The same is for employment and working conditions and the payment of social allowances.

**Mutual
recognition of
education**

2.3 Free movement of services

The free movement of services

... this differs from the free establishment in that aspect that free movement is considered only if the service provider temporarily provide his services in another country as is his country of residence.

**EU citizens
need no
working
permit**

What have made the exchange of services over the border that difficult in the past? Those were exactly the regulations regarding to the employment of foreigners (working permit regulations). Now all workers are allowed to work in any EU member country without the working permit.

If the entrepreneur sends his workers to provide service in another member country is the host country entitled to prolong national regulations concerning minimum wage and tariff levels also on these employees from other countries.

3 EU ENTRY EFFECTS ESTIMATION ON PLUMBER CRAFT

Possible expectations and fears of xxxxx plumbers concerning future competition situation after EU entry can be summarized as following:

3.1 Material prices

Plumbers do not usually purchase their materials from just a few big producers, but preferably from the wholesale. They buy their materials only

party direct from the producer. Furthermore they prefer convenient price offers abroad as well.

3.2 Establishment of enterprises in XXXXXX and establishment of XXXXXX enterprises in other EU countries

No huge migration is generally expected. This also corresponds with the previous experience in the EU. Foreign enterprises will likely establish themselves in form of subsidiaries of big international companies namely in the field of flat roof and central spaces. In addition there have to be taken into consideration also possibly reinforced appearance of big international house technique enterprises, but this will be rather the case in the field of large objects.

**No
substantial
migration is
awaited**

There is one serious risk namely if foreign general contractor will cooperate with subcontractors that come from abroad as well. But this could be the case particularly in the field of big public orders. Nevertheless the dependence of small plumber crafts as subcontractors is seen critically. But nevertheless the dependence of the small plumber crafts when participating on large public contracts is seen critically.

3.3 Summary

It can be summarised that XXXXXX plumbers should face the joining of common market with the self-confidence. This optimism is based on the fact that the enterprises in this branch are acting locally or in the relatively limited regional area and provide a specific performance typical just exactly for that region. So it means that our plumbers should not have fear from the direct competition in form of foreign enterprises or new subsidiaries of foreign enterprises established in XXXXXX. Only in the border area there are expected possible direct effects on local enterprises, but rather in form of positive effects – more order chances and less in form of negative effects - additional competition at home. Price reductions are expected as well. Furthermore cooperation of more enterprises within the European single market can bring considerable advantages. For flexible small enterprises and good qualified professionals, there will be always enough business opportunities.

4 CHANCES AND RISKS FOR PLUMBERS AFTER EU ENTRY

Chances and risks for plumbers in the EU

Chances:

- More commercial chances on the domestic market
- Long-term growth of the service branch
- Increase of the number of the consumers of middle age
- Increase of supplies
- Flexibility of production systems
- Abolition of technical barriers

Risks:

- More competition from abroad
- Higher technical standards by supplies
- Awarding of contracts on large enterprises located elsewhere
- Concentration tendencies in the domestic market
- Rising of labor costs
- Competition of more productive large enterprises

5 LONG-TERM SUCCESS FACTORS FOR THE COMPETITIVENESS

Important competitiveness factors

- a) Quality of the performed work
- b) Quality and education of the workers
- c) Image and appearance on the spot
- d) Quality of applied materials, tools and machines
- e) Specialisation, market niches orientation
- f) Information and consulting customer services
- g) Taking into consideration the flexibility
- h) Adherence to completing dates and proceeding of orders
- i) Lower level of internal expenses

This list of the competition factors underlines the craft character of this branch. This means that typical competition factors as the "very high market share" factor and "very low price" factor are of low importance in this branch. Even if enterprises complain about the fact that they have to face the competition offering for unreal low prices, it is clear to them, that low prices as competitive factor for performance of craft services and activities are neither preferable nor particularly positive considered. The willingness to reduce own price arises only in case that it is inevitable for reaching of planned turnover. Displacement of enterprise on the market due to price

competitors is not common competition behaviour in decentralized branches. Nevertheless, essential are also the presence of the following success factors: contacts abroad, standardized way of work, new materials and technology, cooperation, life-long learning through seminars, fairs visits as well as involvement of the employees in decision making (motivation, arises from the responsibility, mobility arises from the creativity of the labor force).

This profession will have to adjust on the fact, that traditional working techniques will be replaced by new technologies, e.g., by new cold adhesive technologies - a waste product of the space research. Also complete offers of roof systems will be a more and more important trend in this business and it will require particularly flexible enterprises and for sure increased cooperation, first of all also with the production industry also in the eastern neighboring countries.

Traditional techniques will be replaced in the future

Also in the plumber branch becomes the problem of waste management (disposal of waste) always a more and more visible centre of interest. Manufacturers and customers stand here before big challenges in the future. This covers many issues from the recycling of packages to the re-use of building materials and the disposal of construction materials in the environment friendly way, e.g., disposal of steel plates and lacquers or the energy savings by the production of the building materials.

Problem of waste management

Special flexibility and fantasy are required by the acquisition of orders: enterprises apply various technologies according to market situation but the individual attitude and recommendations in form of personal contacting plays still the very important role. It is important to contact personally relevant architects, construction masters and construction contractors, also to establish contacts in form of telephone marketing by using address list of construction crafts, advertising, Direct-Mailing etc. Your creativity should have no borders.

6 PLUMBER CRAFTS COOPERATION

There is no fundamental aversion against cooperation within this branch. However, it has to be considered that the main incentive for establishment of an enterprise lays always in the realization of own ideas, self-determination and self-realization. In order to cooperate successfully certain presuppositions must be fulfilled already before the beginning of the cooperation:

- Enterprises must precisely analyse their structure and problem position before starting of cooperation and determine in which functional areas cooperation makes sense for them. The competitive situation at the market must be also examined and considered.

Presuppositions for plumbers' cooperation

- There should be economical reason for cooperation regarding content of performance; the targets and the cooperation form must be defined precisely.
- The increase of the performance strength of the cooperation partners must be achieved directly (clear economic advantages, risk decrease, market maintenance and development etc).
- The trust relation among partners assumes identification with the interests of the cooperation and in the long term a proper and successful management as well as a constant discussion of strategic decisions. This should prevent possible loss of self-reliance of enterprise and the distrust regarding the cooperating partner.

Central cooperation fields are:

Central cooperation fields

- a) Purchase and material cooperation:** advantages are cheaper prices, bigger assortment, lower storage costs, better information about materials and technologies, common capital assets (vehicle park, cranes etc.), better financing, better calculation of material needs as well as pre calculation and post calculation etc.
- b) Computing, enterprise organization, account system and tax advice:** this is a matter of common acquisition, development of programs for accounting systems (personnel requirements, bookkeeping, cost calculation, performance registration, tender preparation and invoice production).
- c) Market research and marketing**
- d) Management and business training, exchange of experience and enterprise advice:**
Entrepreneurs and workers must still use more of qualifications in the competition. This cooperation field is already now developed. Particularly exchange of experience brings practical experience to lot of enterprises. Using of common enterprise advisory services brings not only costs saving, but also additional know-how effects.

Additional cooperation fields:

Further cooperation fields

- Performances assurance, finance and assurance advisory
- Cooperation in the personnel sector
- Advertisement
- Legal advisory

7 QUESTIONS

To define chances and risks of the business and to draw from it the correct conclusions means, to answer as precise as possibly a multitude of questions, which refer:

- * to the analysis of an own enterprise and his position in the competitive environment,
- * to the developing goals
- * to the appropriate strategies and measures.

Appropriate questions for the enterprise or competition analysis can be, for example:

- * What kind of products / services do we offer?
- * What can we do we particularly well?
- * With what kind of products do we achieve what kind of results?
- * With what kind of customer groups will we handle?
- * By what kind of customer groups do we achieve what kind of results?
- * What is our market?
- * Why do we restrict our performance to this market?
- * Which kind of advantages and disadvantages does have our location?
- * Who are our strongest competitors, measured by the capital or sales?
- * Which of our competitors are the most innovative?
- * Which are our most important strengths and weaknesses?
- * Which planning and control instruments are available for us?
- * What accuracy has achieved our pre calculation in comparison with post calculation?

Questions to the developing goals can be for example:

- * What are our substantial strengths that we can sell to our customers particularly well and that can distinguish us clearly from our competitors?
- * Why would customer choose our product even if the distance would be bigger?
- * What chances do we have by export deliveries to the previous target groups?

Chances and Risks can be after all defined only individually

- * What chances have we if we want to attend new export target groups or delivery chains?
- * Which additional costs appear, if we perform our services to the more distant customer?
- * Which target groups do we want to address more intensively / particularly / exclusively?
- * Which products or product groups should be further supported / launched?
- * Which service performances should we strengthen?
- * Which marketing activities can strongly influence our sales?

Questions to the definition of appropriate strategies and measures are, for example:

- * What do we have to do in order to achieve our goals in for example these areas?
 - Customer relations
 - Offered assortment
 - Service performance
 - Marketing and advertisement
 - Cost structure
 - Planning and control
 - Calculation
- * Who is responsible for the execution of the measures?
- * What deadlines do we have to pay attention to for the separate measures?
- * Who is responsible for coordination and control of the specified measures?