



Institut für Bauforschung e.V.



Developing Plans for Action and Programmes of Training Courses and Advanced Education for Small and Medium-Sized Building Trade Operations for Successful European Foreign Construction

Research Work

Short Report

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Developing Plans for Action and Programmes of Training Courses and Advanced Education for Small and Medium-Sized Building Trade Operations for Successful European Foreign Construction

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1 The Purpose of This Research Assignment

This research work has the purpose of enhancing human resource development, building quality and the image of the German construction industry by boosting its international competitiveness. This was done by formulating plans of action and programmes of training courses and advanced education for hands-on, competitive and successful foreign construction projects. These programmes include state-of-the-art engineering and legal expertise for small and medium-sized building trade operations and small and medium-sized builder-owners (i.e., general contractors) to enable them to successfully compete on European construction markets in proximity to the German border such as France, the Netherlands and Great Britain.

2 How This Research Assignment will be Carried Out

Since this research project is targeting real-life practice, an empirical/analytical strategy was chosen for answering the pivotal questions thrown up by research. We not only evaluated building trade operations/builder-owner firms that have already successfully carried out best-practice projects in European countries near the German border. We also focused on qualitative surveys of various institutions concentrating on issues of encouraging external economic relations and training courses and advanced education. The study's methods took the following steps:

1. literature/database research and tracking best-practice projects in foreign construction along with the actions called for and requirements made of training courses and advanced education
2. surveys of market players to compare the actions called for and requirements made of training courses and advanced education and performance
3. evaluating the particular conditions for accessing markets in the countries selected via various building trades, evaluating building trades with successful programmes of training courses and advanced education and the requirements made of training institutions.
4. comparing the temporary findings with legal and technical requirements from the countries under study.
5. matching the sets of requirements with the performance profiles of German small and medium-sized building trades for successful foreign construction projects
6. having Workshop 1 on Foreign Construction (How the German Construction Industry Can Stay on Track for the Future in Düsseldorf, Germany on June 11, 2008) identify and put these plans of action and programmes of training courses and advanced education into the Manual for the Construction Industry.
7. discussing proven plans of action and programmes of training courses and advanced education for small and medium-sized building trades/builder-owners at Workshops 2 and 3 (in Hannover, Germany on September 23, 2008 and in Düsseldorf, Germany on October 17, 2008).

3 Compilation of Findings

3.1 The Economic Situation and Selected Building Sector Data

First of all, this research work extended over the period of July 2007 to June 2008 where the technical/substantive study of the general economic situation and the specific construction market situation of the countries under study was completed as per Q 4 2007. Unfortunately, due to the financial and economic crisis that broke loose in autumn of 2008, the calculated economic data, all of which forecast a very positive development, cannot be maintained in all areas. This especially concerns the forecasts on gross domestic product or growth rates in the building sector. The British construction market is a textbook case, because it had been booming for more than a decade before experiencing a dramatic slump in spring of 2009.

Secondly, findings indicate that no survey or documentation, either on the national, state or regional levels, has been drawn up on the building activities of German small and medium-sized builder-owners or building trade companies in France, Great Britain or the Netherlands. Given these factors, it is easy to see the challenges in capturing the quantitative dimensions of the foreign construction activities of small and medium-sized builder-owners and building trade companies in each of the countries. Indeed, under these conditions, it is not even possible to make out a representative number of suitable best-practice companies because there is no information on a basic totality. Furthermore, it is not even possible learn any lessons from studies directly focusing on this subject matter (such as the study authored by the Bonn, Germany-based Institute for Research on Small and Medium-Sized Businesses on the Significance of Foreign Trade Activities for German Small and Medium-Sized Businesses published in April of 2007 on behalf of the German Federal Ministry of Economics and Technology) since it does not differentiate according to the building sector. The only thing that can be done at this point is repeat the qualitative assessment of a variety of crafts and foreign-trade institutions here, namely that foreign construction has excellent perspectives for development for German small and medium-sized building trade operations and builder-owners, without being able to underscore this statement with statistically robust figures.

3.2 The Conditions for Entering the Market

This section asked what held out the greatest promise for furnishing performance and staking out markets (among them traditional foreign construction projects or establishing branch offices, subsidiaries or associated companies) while delving into issues of establishing companies and various aspects of labour, tax, construction and building contract law in each of these countries including registration duties, technical categories and certain non-formal conditions.

3.3 Conditions and Factors for Success for Specific Countries and Construction Markets

This section launched a study of the structure of this sector and business practice to point out how industrial heavyweights dominate here and to show how general contractors take centre stage. This study also listed some major differences to the conditions prevalent in Germany in terms of personnel qualification and motivation such as a comparison of the educational and vocational education systems. Furthermore, this study indicated that there were also some measurable differences in the relationship between clients and contractors and the way subcontractors are employed in relation to the customary practice in Germany. A case in point in the countries under study is wide-spread collaboration in networks.

3.4 Sets of Requirements and Performance Profiles

The study discovered some similarities, but also a series of substantial structural differences to the German sets of requirements and performance profiles in terms of planning, financing, tendering and contract-awarding processes. These are the areas that are substantially driven by public-law constraints, although the differences on the company level, such as procurement processes, construction site management, quality assurance or monetary project handling, are much less.

3.5 Plans of Action and Programmes of Training Courses and Advanced Education

To be successful at foreign construction, small and medium-sized building trade operations and builder-owners have to tailor their plans of action and programmes of training courses and advanced education to the company's specific needs and capabilities. The best way to go about this is scrutinising the specific needs on a graduated scale:

■ corporate strategy deliberations:

- formulating foreign construction either as a separate business field or as one that only supplements the activities on the home market
- identifying lucrative countries on track for the future
- identifying competitive construction services/trades
- building up or joining networks in the target country
- positioning yourself on the market

■ procuring and quantifying information:

- surveying abundant information on the target market and its constraints wherever necessary taking advantage of consultation services such as for-foreign trade consultants or chambers of foreign trade)
- considering to what extent formal requirements can be met (such as décennale insurance in France)
- matching needed/available professional qualifications (such as linguistic knowledge, intercultural competence and technical expertise)
- discovering what other qualifications are needed (such as for required registrations)
- collaboration with foreign business partners or other institutions in terms of training courses and advanced education (such as a temporary exchange programme for trainees or other workers or auditing in foreign partner companies)
- boosting international categories of vocational training (such as by participating
- in programme such European Assistant in Trades, Let's Go, BAND or Training Bridge)
- creating customised training courses and advanced education curricula for eliminating qualification deficiencies (such as language or intercultural training courses, training in occupational safety and technical/craft skills)

- mapping out work organisation:
 - planning new or adapting already existing work routines (such as order acquisition or logistics)
 - sharing labour with business partners
 - signing on seasoned workers
 - adapting quality management to any new customer expectations
- procurement and supply:
 - construction sites for 110 volts, approved scaffolding, protective employee-equipment and material supply (because of lack of availability of construction materials regularly available in Germany)
 - hiring any new needed personnel (with the specific foreign experience)
 - transport, logistics and customs regulations
 - room and board for delegated personnel
- the forecast of financial findings:
 - the costs for third-party consultation services
 - investment and qualification expenditures
 - cost planning for management, material, wage and miscellaneous costs
 - whatever costs of establishing a company abroad
 - the forecast of the monetary and temporary personnel expenditures
 - the costs of collaboration in networks
 - the costs for advertising/attending fairs
 - the expected proceeds situation

All of this goes to show that foreign construction affects virtually all areas of the company while also touching upon lower-priority or totally irrelevant issues and challenges on the home market. This is the reason why it is absolutely necessary to approach these issues on an individual basis as evidenced by a whole series of examples addressed by the companies surveyed:

- a German builder-owner has major difficulties taking out the obligatory construction warranty insurance policy (décennale) that forms the prerequisite for accessing the market
- a German building shell firm is very interested in more orders in Great Britain because it had excellent experience handling a large-scale construction job, although to date it has not been able to get any orders

- a supplier of turn-key single-family dwellings interested in the Dutch market is not very successful at getting private builder-owners because, contrary to his experience in Germany, this market is controlled by project developers/general contractors in the Netherlands
- a German roofing company wants to continue working in Great Britain after several successful projects and other requests from clients; unfortunately, it is very difficult to motivate his craftspersons because some of the workers have strong family connections to their local home towns
- after excellent experience in the Netherlands, a structural engineering company would like to handle more projects there; however, since he always does all of the construction management work himself, he would have to be on hand both at Dutch and German construction sites

For all practical purposes, each of these scenarios could be an example of how foreign construction is either delayed, obstructed or even totally defeated. This is the reason why it is absolutely necessary to make a thorough analysis of specific company constraints to plan and come up with better ideas for developing customised plans of action and programmes of training courses and advanced education. In any event, there are no easy answers that are applicable in every case.

Research also found:

- German small and medium-sized businesses are already highly successful at their activities abroad. What's more, their foreign commitment has a positive impact on domestic employment, turnover and revenues. Needless to say, small and medium-sized businesses in the building sector have a strong attachment to their homes in Germany, although the percentage of imported purchased materials and services in its exports is much lower than with industrial heavyweights. In other words, small and medium-sized businesses furnish a much greater percentage of real-net value in Germany than industrial heavyweights. The positive impact that export activities and foreign companies have on employment and growth are a good reason for bolstering the internationalisation of small and medium-sized businesses. There is not only a definite market potential for building abroad, but also a corporate potential for exporting companies suited to carrying out foreign activities, as revealed by the demand for services of commerce chambers in terms of estimates made by experts at the chamber and encouraging external economic relations.
- Chambers of commerce, associations and other institutions provide a wide range of

information and manuals (even if they are not always prepared according to building topics) for specific European countries for companies interested including specific training courses. German small and medium-sized businesses only have to take advantage of this information for their corporate strategies to launch foreign operations with sustainable preparation.

- There is no specific economic data for small and medium-sized businesses and builder-owners to launch specifically foreign construction operations. Since there is no question that this is an important issue, there should be efforts to meet this need with the appropriate statistics
- Encouraging training courses and advanced education has been seen as an important activity because life-long learning and keeping pace with burgeoning internationalisation in labour processes is becoming increasingly important for more and more people. There has been a process of change for many years that leaves no doubt that encountering other cultures and languages is increasingly becoming a part of everyday life in Germany.
- Export-oriented companies profit within the European Union from the reliable legal framework of the European domestic market in the framework of internationalisation.

We should be mindful of the fact that companies need greater backing if they want to translate their export potential into high-performance exports. Beyond this, the constant process of standardising the European domestic market should also be stepped up for the building sector by focusing on reducing red tape, making inner-European insurance legislation accessible, mutual approval of construction materials, simplifying the import and export of construction materials, harmonising technical rules and standards on the European level while making them more legible.

- Germany is highly respected in the European countries as far as the quality of building work is concerned. The countries under study are not anywhere as far advanced in terms of taking advantage of saving energy and alternative sustainable construction designs, which means that they constitute a substantial market potential for German companies. In the long term, things such as ecological construction materials, composite thermal insulating systems, processing cellulose thermal insulating materials and energy-saving building designs will be coming increasingly to the fore on foreign markets.

- Building in networks will be taking centre stage in future and this is an arena where German construction companies will be able to learn lessons from their foreign competitors who are more stringent about practicing this co-operative form of partnership in their home markets.
- In the final analysis, this research work has also indicated that most process owners in the target group are still not aware of the market opportunities that German small and medium-sized businesses have in the European construction market. This will call for increased efforts to make them conscious of the opportunities offered by the market because major portions of the target group are not inclined to think in terms of future opportunities in times of a relatively satisfactory level of economic activities on the domestic construction market. To sum it all up, the potential of foreign construction still goes unrecognised.