

THE IMPACT OF THE EUROPEAN CONSTRUCTION PRODUCTS DIRECTIVE ON UK CONSTRUCTION PRODUCT MANUFACTURERS

F. Borthwick¹, R.L. Galloway² and R. Seden³

¹*School of the Built Environment, Liverpool John Moores University, UK*

²*The Graduate School of Business, De Montfort University, Leicester, UK*

³*Centre for Learning and Development, De Montfort University, Leicester, UK*

The UK construction product manufacturers play a vital role in the construction industry and the national economy. Construction products account for approximately 30-40% of total project cost and is seen as an area where the industry needs to improve. The introduction of European Standards for construction products should mean that European and UK markets will become more open and competitive therefore having an impact on UK product manufacturers. The purpose of this paper is to highlight the progress of the research. It will identify the importance of the construction products sector to the construction industry, explaining the Construction Products Directive and its assumed role in creating a single market in construction products in Europe.

Keywords: construction products directive, markets, strategy.

INTRODUCTION

This research is intended to identify the significance of the European Construction Products Directive (CPD) and its importance to UK Construction Product Manufacturers. The main aim of the Directive is to introduce harmonized standards and testing procedures for construction products. The CPD has now been in place for ten years and there are still no Harmonized European Standards in full operation for construction products.

Technical standards have long been used as a barrier to trade, costing manufacturers time and money to gain other countries standards before they can place their product on the market. Harmonized European Standards are aimed at removing this barrier and therefore improving competition in markets. The UK market is already recognized as being relatively open and present import statistics show this. UK Producers should use this opportunity to gain entry into new markets but also protect their home market.

As the Directive is still in its infancy, previous research into this area is very limited. There is also no evidence of the impact on the industry. This research seeks to address this issue.

THE CONSTRUCTION INDUSTRY

The construction sector is the single most important industry in any national economy. In most countries it represents between 5 and 15% of their Gross Domestic Product (GDP), 11% for the EU in 1996 (COM (97)539 final). A high proportion of the value-

Borthwick, F, Galloway, R L and Seden, R (1999) The impact of the european construction products directive on uk construction product manufacturers. *In: Hughes, W (Ed.), 15th Annual ARCOM Conference, 15-17 September 1999, Liverpool John Moores University. Association of Researchers in Construction Management, Vol. 1, 231-8.*

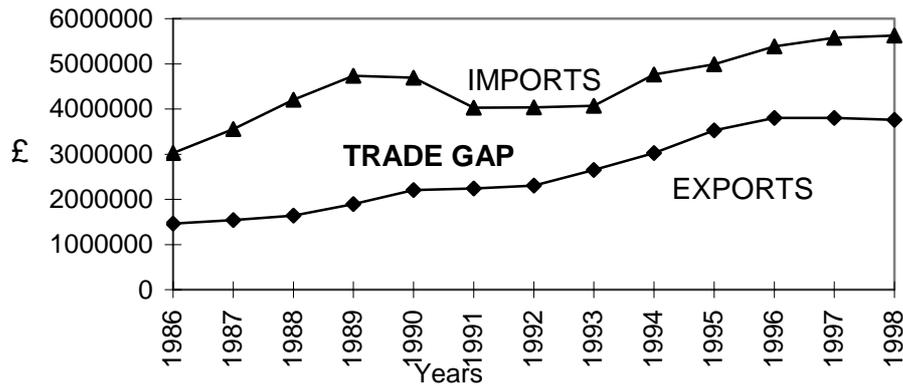


Figure 1: Building materials and components overseas trade figures
 Source: DETR Housing and Construction Statistics 1986 - 1998

added, employment and technological innovation created by the industry is generated indirectly through the activities of the producers and manufacturers of construction materials and components. In 1990 the consumption of building products in the EC amounted to approximately 147 billion EURO, and it is estimated that materials can account for about 40% of the value of all construction work (NEDO 1978; Latham 1994). This clearly shows the importance of the materials and components industry, yet in the UK there is a trade deficit of over £1.8 billion for construction products.

This accounts for approximately 15% of the total visible trade deficit of the UK and although there was a decline in the mid-1990s, this was not through the industry becoming more competitive in the home and export markets. Worrall *et al.* (1995) have shown that improvements in the construction products trade balance were a result of the recession in the UK economy rather than improvements in industrial performance. When there is an increase in construction output, the manufacturers cannot cope with increased demand due to lack of capacity. Imports increase to fill this shortfall and when there is a downturn in work, imports drop. This can be clearly seen in Figure 1, with the increase in the deficit over the last two years.

The removal of tariff and non-tariff barriers, as proposed in the CPD, will have a major impact on the industry. This impact could be positive or negative. This should mean that trade in construction products should increase and there should be a wider selection to the customer. If this is the case, in the UK, Producers will have to improve their competitiveness to avoid a negative impact, to compete successfully in:

- the domestic market, so as to keep incoming products that have before been hindered in entering the UK market, from gaining a position.
- the new European markets of the Single Market and to take advantage of the links that come with being a member of the EU, i.e. trade agreements with Eastern Europe.

The UK deficit shows that our market is fairly open to competition and therefore the UK Producers should gain more from the opening up of other markets, but at the same time we must try to improve this trade position. Producers can develop greater economies of scale and be more competitive in the home market therefore reducing imports and at the same time being able to increase exports. This would be a positive impact.

BUSINESS ENVIRONMENT

All firms operating in the Community are having to face up to major changes in their operating environments. The elimination of barriers and the opening up of public procurement to wider competitive bidding is very significant. Both large and small enterprises are affected: the latter, many of which supply only local or national markets, will face greater competition and will be forced to re-think their strategies, meaning product diversification and/or looking at wider markets.

The increasing internationalization of business together with the growing intensity of global competition imply that many firms need to internationalize quickly. Speed of market entry and development, will become an important determinant of the choice of market strategy. There are several options for Producers to look at when deciding what is their best strategy. Although the Directive is removing one of the barriers to trade, there still remain barriers that affect market entry. Research has identified 19 different market entry barriers in total (Bain 1956, Porter 1980, Karakaya and Stahl 1989 Rugman and Verbeke 1991). Six of the most important barriers are:

1. Cost advantages of incumbents
2. Product differentiation of incumbents
3. Capital requirements
4. Customer switching costs
5. Access to distribution channels
6. Government policy

The first five barriers are economic-based, whereas government policy can also be shelter-based. A shelter-based trade barrier imposes artificial costs on rival firms, an example of this being government regulations. It is in this area that the CPD will work, harmonizing standards which will eventually lead to harmonized Building Regulations and control.

As the market becomes more competitive these entry barriers should become less restrictive. The manufacturer must choose the most advantageous market entry option that matches its market scope, resources and capabilities and also the entry barriers of that market.

This Directive is going to have an impact on the strategic decisions that UK Producers take. There may be some manufacturers who believe that their market will not change with this new Directive, and their strategic decision is to carry on as normal to reach the objectives that they have set themselves in their strategic plan. This may be due to their existing practices already taking account of most of the CPD prescriptions, or through naivety.

If the importance of this area continues to be overlooked, not only will product manufacturers loose out but also the contracting industry will suffer. Unlike most industries, construction is both a service and a product. Prospective clients have an understandable preference for using construction companies with whom they are familiar and in whom they have confidence. This puts a high premium on having a physical presence in a given market and acquiring familiarity with the local environment. Such efforts would be to little avail if a construction company, having established itself in a particular market, was effectively prohibited from operating in it

because the technical specifications of the construction products being used were unacceptable to the regulatory authority of the host country.

The CPD's main impact on the Producers' strategy should be through its effect upon entry barriers. The reduction in barriers should therefore mean there will be more opportunities to enter new markets. With the introduction of the CPD, not only will barriers due to government policy be reduced, but those manufacturers who take steps to be more competitive will eventually reduce the other barriers to entry.

THE DIRECTIVE

The Single European Act 1987 set a target date of the 1st January 1993 to establish a Single European Market and identified three specific areas where barriers needed to be removed to achieve this aim.

- Physical Barriers - frontier controls on goods and individuals.
- Technical Barriers - meeting divergent national product standards, technical regulations and conflicting business laws.
- Fiscal Barriers - taxes on consumption's, i.e. VAT and excise duties.

All three of these areas affect the Producers, but this research specifically considers the technical barriers.

Technical trade barriers exist because of different perceptions of health and safety, protection of special interests and protection of strategic industries. The CPD aims to introduce harmonized European Standards for construction products which will eventually lead to standardized Building Regulations and therefore remove these barriers.

In 1986 the Commission carried out a comprehensive study into the expected benefits of the Single European Market. The Cost of Non-Europe Report (BIPE 1988) estimated for the Building Materials Sector that;

- the costs directly associated with barriers to trade in building materials were 820 million euro.
- the indirect effects were 1.7 billion euro for the five largest Member States, approximately 1-2% of the value of production.

UBS-Phillips and Drew Global Research Group (1988) and The London Business School, (1989) concluded that the report had been 'overly optimistic' and 'exaggerated' in its findings. Their research stated that the building materials and construction market would remain relatively unaffected by the internal market and fragmentation would also not be greatly reduced because the diversity of demand within Europe is caused by differing preferences, languages, cultures, climate, etc. that will remain largely unaffected by the measures of '1992'. This is supported by the current research with Producers seeing national preferences as an important characteristic that must be considered when exporting products outside the UK.

The CPD was introduced to the Member States of the EU for ratification in 1988. The Directive is a New Approach Directive. These are developed to be flexible and simply lay down the minimum essential requirements for protecting health, safety and the environment, replacing the old process which was very slow and complex. The CPD is different from any other Directives relating to product standards, as the

essential requirements relate to the product when incorporated in the construction works (89/106/EEC). The six essential requirements for the CPD are:

1. Mechanical resistance and stability.
2. Safety in case of fire.
3. Hygiene, health and the environment.
4. Safety in use.
5. Protection against noise.
6. Energy economy and heat retention.

As long as the product meets the minimum essential requirements laid down deemed necessary in the European Standard or the European Technical Approval, the CE mark can be affixed and the product can be sold legally within the Member States.

The CPD also aims to introduce the mutual recognition of testing and certification process for products. This should mean that a Producer will no longer have to commit extra time and money having a product approved for another Member State when it already meets the standard of its own country. Divergent standards and lengthy testing and certification procedures were estimated at costing Producers approximately 2.5 billion EURO (Cecchini 1988). The use of standards and regulations in this way is a form of protectionism and is therefore a non-tariff barrier to trade.

The expected benefits to the end user should come in the reduction of cost as the market opens up to products that are produced cheaper than in the home market. The domestic Producers will no longer have the advantage and will have to reduce costs to be more competitive. This should also mean a wider choice of products should be available.

RESEARCH METHODOLOGY AND WORK TO DATE

This research is concerned with the exploitation of existing knowledge through applied research, as defined by Beveridge (1957). In this respect, attention has been paid to present processes and market strategies. Once the historical developments and present situations have been evaluated, it will then be possible to investigate the options available to Producers.

This paper reports on the initial research which has helped direct subsequent research more efficiently. Detailed results of later intensive work will refine inferences based on the more general earlier stages. The real benefits of the Single Market should start to be evident by the turn of the century and the full impact of this Directive should also be realized. By then, it is hoped, there will be European Standards and European Technical Approvals in place and being used.

Even at this present time, there is still little published material on this specific area and the main source of references are the European Commission and Government bodies involved in this area and Trade Associations. An important initial finding was the lack of research into the market environment of construction material producers. There has been much research into the construction industry, mainly concentrating on contracting and the professions, and much research into manufacturing, but none specific to construction materials, which has certain distinct characteristics compared to, for example car manufacturing.

A series of interviews were carried out to provide information to develop a greater understanding of the research area and to test the primary hypothesis that had been developed:

‘The Construction Products Directive will impact on the strategic decisions that UK Construction Product Manufacturers make to changes in their business environment’.

Two distinct groups were interviewed;

1. Major UK Producers, chosen because of their existing European links and their product has a significant proportion of the total construction materials involved in a project.
2. Bodies involved in the formulation of the CPD for the UK, i.e. the Building Research Establishment, the Construction Products and Materials Sponsorship Division of the DOE (now DETR) and the National Building Materials Producers Association.

All interviews used the same question format, but the interviews were semi-structured to allow the interviewee to expand on areas if they felt necessary. This was so as much background information could be gained into the Directive and the implementation problems that were occurring and to compare how the two different groups saw these issues.

The main findings are clear from the interviews:

- Both groups interviewed believed that the Directive would have an impact, but they differed in the time scale of this impact.

The Producers believed that the real benefits would not be apparent for at least another ten years and that any market strategy at present to enter Europe was due to market size and not because the CPD was facilitating cross-border trade.

Those involved with the formulation of the Directive believed that the benefits would be in the long-term and not only in the products market but for the construction industry as a whole. Greater competition due to a wider choice of products should lead to a reduction in prices and encourage new technologies and systems to be introduced.

- Both groups, clearly stated their concerns that greater competition may lead to lower quality products entering the UK market.

Without correct enforcement of the Directive, sub-standard products could be used as the cheapest option and therefore have an affect on the quality of the project. However, the Producers were more concerned this would affect their market share rather than the image of the construction industry.

- The Producers appeared to be more concerned with the implications the Directive had on their present market position.

The larger manufacturers already have an involvement in European markets and are committing their involvement into the development of the European standards, to protect their existing markets. They do not see any immediate benefits as they have already invested time and money in gaining other countries standards for their products. The smaller manufacturer will feel the impact in the home market and will need to develop strategies to keep their market position in the future.

- Producers were also concerned that new non-tariff barriers, for example local regulations that are not covered in the Directive, would be formed.

It would appear that this was a valid concern, as some products are now being asked to meet certain Member States environmental legislation requirements or gain the Quality mark for that particular country before it can be placed on the market. Both of these are non-tariff barriers that are not covered by the CPD or technical standards.

It was clear from the interviews that both groups saw the Directive as being important. However some of the Producers were not as enthusiastic and did not appear to look at the long-term implications. They were more concerned with the present market situation and apart from being actively involved in the standards technical committees, they were not fully committed to developing new European markets. This is in contrast to some of the large European manufacturers.

FUTURE WORK

The research is now considering the business environment for the Producers. A questionnaire has been devised to test Producers views on the Directive, its impact on their business environment and any marketing strategy changes at present or proposed in the near future. As the construction product industry is vast, unbiased random sampling of Producers is considered impractical for this investigation so the research concentrates on two specific groups that have been chosen by certain criteria. The sample frame for the two groups are:

1. Products that are major components within a project and involve a high investment in manufacturing processes and plants for production. The products are not classified as the 'typical' exportable products because of the high transportation costs due to the bulk nature of the product. The product areas to be tested are Cement, Float Glass and Bricks.
2. Products that are minor components within a project and rely more on imported raw materials to manufacture the finished product. The Producers are national rather than international and the products are more exportable in nature. The product areas to be tested are Mineral Insulation Products, Copper Tubes and Fittings and Builders' Woodwork.

As the questionnaire is targeting both technical and marketing issues, two questionnaires will be sent to the Producer, one to the Marketing section and one to the Technical department. Analysis will then show if there is any correlation between these two areas, as well as drawing some conclusions on the Directive and its implications to market strategy.

CONCLUSIONS

The CPD has been introduced to reduce non-tariff barriers to trade and improve the competitiveness of European companies. UK product manufacturers should have adopted a strategy to incorporate this major change in their business environment.

Preliminary research suggests that there is little sense of urgency about this although the Directive has been in existence since 1988. The next stage of the research will develop a clearer picture of the actual position in the UK. It will show whether the aim of the Directive is being reached and therefore whether the benefits of the Single Market are actually becoming a reality. The conclusions should therefore be both useful for the industry and as a basis for further research.

This research intends to show that not only strategic decisions to market entry must be made, but also the attitude of the industry to this new openness must change. The larger manufacturers can use this opportunity to develop European and global strategies, as harmonization of standards will lead to standardized products, marketing and production techniques.

REFERENCES

- Bain, J.S. (1956) *Barriers to new competition*. Cambridge, MA: Harvard University Press.
- Beveridge, W.I.B. (1957) *The art of scientific investigation*. 3ed. London: William Heinemann Ltd.
- BIPE (1988) *The cost of non-Europe in building products*. Translated into English by the National Economic Development Council, 1989. London: National Economic Development Office.
- Cecchini, P. (1988) *The European challenge, 1992: the benefits of a single market*. Aldershot: Wildwood House.
- Davis, E. (1989) *1992 Myths and realities*. London: Centre for Business Strategy, London Business School.
- DETR (1999) *Housing and construction statistics*. London: HMSO.
- DGIII, European Commission (1997) *The Competitiveness of the construction industry*. COM(97) 539 final Office for Official Publications, Luxembourg.
- European Commission (1989) *Directive 89/106/EEC*. OJ L40/12 Office for Official Publications, Luxembourg.
- Karakaya, F. and Stahl, M.J. (1989) Barriers to entry and market entry decisions in consumer and industrial goods markets. *Journal of Marketing*. **53**, April.
- Latham, M. (1994) *Constructing the team*. London: HMSO.
- NEDO (1978) *How flexible is construction?* London: HMSO,
- Porter, M.E. (1980) *Competitive strategy*. New York: The Free Press.
- Rugman, A.M. and Verbeke, A. (1991) Trade barriers and corporate strategy in international companies: the Canadian experience. *Long Range Planning*. **24**(3).
- UBS-Phillips and Drew Global Research Group (1988) *Europe 1992: breaking down the barriers*. London: Economic and Sector Prospects.
- Worral, H., Norman, G. and Flanagan, R. (1995) Intervention analysis and overseas trade in UK construction-related materials and components. *Construction Management and Economics*. **13**: 475–484.