

Construction products — Assessment of release of dangerous substances — Barriers to trade

ICS 91.100.01

National foreword

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**Construction products - Assessment of release of dangerous
substances - Barriers to trade**

Produits de construction - Evaluation de l'émission de
substances dangereuses - Barrières aux échanges

Bewertung der Freisetzung von gefährlichen Substanzen
aus Bauprodukten - Handelsbarrieren

This Technical Report was approved by CEN on 3 February 2009. It has been drawn up by the Technical Committee CEN/TC 351.

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Foreword

This document (CEN/TR 15855:2009) has been prepared by Technical Committee CEN/TC 351 "Construction Products Assessment of release of dangerous substances", the secretariat of which is held by NEN.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This Technical Report is prepared by CEN/TC 351 "Construction products – Assessment of release of dangerous substances" and indicates the barriers to trade as identified by CEN product Technical Committees in relation with emission of regulated dangerous substances into indoor air, surface water, groundwater or soil. CEN was asked in Mandate M/366 to describe if and how these barriers to trade can be resolved or prevented by the set of standards included in the work programme.

This report looks first at existing technical barriers, but also examines whether potential technical barriers exist and provides examples of these barriers.

However the market sometimes makes little or no distinction between a technical barrier to trade (or even a potential barrier to trade) and the existence of barriers to the use of products that are legally placed on the market having already met the technical standard requirements. Manufacturers are disturbed that they can comply with the requirements of the CPD and any harmonised standards, but still encounter difficulties in having their products specified and used, or even where they have to complete additional hurdles beyond those required in the harmonised technical specification. As the subject came up many times, this report contains numerous references to such "barriers to use", but this subject will be dealt with separately in greater detail in another report since it is not within the scope of CEN Standardisation to remove barriers to use.

Similarly, there is no attempt in this report to examine the question of trade barriers resulting from any other market mechanisms introduced at either EU level or national level, which results in or from fiscal penalties, quotas or international trade agreements since these are beyond the scope of technical harmonisation.

This Technical Report is expected to be used by the Commission to address the issue of barriers to trade with Member States and to discuss with regulators their requirements to prevent harmful effects as stated in Essential Requirement 3 of the CPD as described in the main body of the mandate M/366.

1 Introduction and Background to the Technical Report

Mandate M/366 of the European Commission to CEN, titled: "DEVELOPMENT OF HORIZONTAL STANDARDISED ASSESSMENT METHODS FOR HARMONISED APPROACHES RELATING TO DANGEROUS SUBSTANCES UNDER THE CONSTRUCTION PRODUCTS DIRECTIVE (CPD), emission to indoor air, soil, surface water and ground water", which created CEN/TC 351, required a number of technical reports (TRs) to assist in the process of standardisation. The first of these TRs was to establish the extent of or presence of technical barriers to trade resulting from requirements under Essential Requirement 3 (ER3), as perceived or experienced by manufacturers of construction products, demanded by EU Member States.

Since the CPD (Council Directive 89/106/EEC of December 21, 1988 concerning construction products) is aiming to lift barriers to trade, there would be no point, in theory, in developing standards in CEN/TC 351 for the purpose of ER3 if no technical barriers to trade exist.

However, the "Grounds" for this Mandate, given by the Commission, state:

'... this standardisation mandate refers to products for which the two following conditions are fulfilled:

- a) the products are or risk to be subject to technical barriers to trade arising from regulated dangerous substances;
- b) the characteristics of the products regarding regulated dangerous substances influence the satisfaction by the construction works, in which they are to be incorporated in a permanent manner, of the essential requirements as laid down in article 3 of the CPD and set out in terms of objectives with regard to hygiene, health and the environment, in Annex 1 of the CPD. These works are subject to legislative, regulatory or administrative regulations of Member States covering such essential requirements specifically in the field of dangerous substances'.¹

Further, in Clause 7 of the "Execution of the Mandate" referring to the work programme of CEN, it states:

'It [the work programme] shall identify and cover all products or product families for which the three following conditions are fulfilled:

- European or national regulations are limiting or banning the emission or content (see IV.8) of dangerous substances;
- Existing or potential barriers to trade have been identified;
- Measurement/test methods for these specified regulated dangerous substances have already been developed and are used on a national or EU level.

Considering point (a) in the "Grounds" for the Mandate it is stated that products "*at risk*" from technical barriers to trade are equally important to existing barriers to trade, and also in the above Clause 7, Execution of the Mandate, the second dash refers to "*potential barriers*" as well as established barriers. This makes the scope of the work wider than simply identifying existing technical barriers.

The Mandate also specifically refers to 'technical' barriers to trade, and CEN is especially asked to consider in the Work Package the following TR:

"Work Package 1: technical reports: procedures for testing and testing schemes

1. Technical Report on examples of existing and potential barriers to trade in relation with emission of regulated dangerous substances into indoor air, surface water, ground water or soil.

¹ Any other type of barrier to trade falls within Articles 30/36 of the Treaty and must be directly eliminated by the Member States.

This Technical Report (TR) shall indicate the barriers to trade as identified by the product Technical Committees in relation with emission of regulated dangerous substances in indoor air, surface water, groundwater or soil. CEN is asked to describe if and how these barriers to trade can be resolved or prevented by the set of standards included in the work programme. This TR will be used by the Commission to address the issue of barriers to trade with the Member States and to discuss with regulators their requirements to prevent harmful effects as stated in ER3 of the CPD as described in the main body of the mandate.”

Therefore, this report is intended to look first at existing technical barriers, but also to establish whether potential technical barriers exist and to provide examples of such barriers.

However the market sometimes makes little or no distinction between a technical barrier to trade (or even a potential barrier to trade) and the existence of barriers to the **use** of products that are legally placed on the market having already met the technical standard requirements. Manufacturers are disturbed that they can comply with the requirements of the CPD and any harmonised standards, but still encounter difficulties in having their products specified and used, or even where they have to complete additional hurdles beyond those demanded in the harmonised technical specification. As the subject came up many times, this report contains numerous references to such “barriers to use”, but this subject will be dealt with separately, and in greater detail, in another report since it is not within the scope of CEN Standardisation to remove barriers to use.

Similarly, there is no attempt in this report to examine the question of trade barriers resulting from any other market mechanism introduced at either EU level or national level, which results in or from fiscal penalties, quotas or international trade agreements since these are beyond the scope of technical harmonisation.

2 Implementation of this Work Item

2.1 Administrative Procedures and Objectives

2.1.1 General

At its inaugural meeting in Malta in April 2006, the members of CEN and CEN/TC 351 agreed to create a number of Task Groups, including Task Group 1 (TG 1). TG 1 was to respond to the TR on Barriers to Trade. A small core group of members, in consultation with a larger ‘consultation’ group created a proposal to tender for the creation of the TR1. The tender called for, *inter-alia*,

‘a preliminary report to provide information on technical barriers to trade in construction products, as EU producers exporting products to other Member States might encounter them. The information should enable decisions on the necessity for agreement on harmonised test methods. Any difficulty of a producer exporting his construction products to another Member State because of differences in regulation regarding the environmental aspects of the product should be regarded as a barrier to trade.’

It was agreed that at least 10 European trade associations would be interviewed on this topic with preliminary information and questionnaires being sent in advance.

2.1.2 Concepts and Scope of Barriers to Trade

Although the principle emphasis of the Mandate and the report was ‘technical’ barriers to trade, discussions outside of the TG meetings with the Commission DG Enterprise, established that the Commission was interested in all barriers to trade including barriers to “use” although it was acknowledged that such barriers could be beyond the scope of CEN harmonisation activities. The Commission also confirmed that the presence of a single national requirement and test method was sufficient grounds for commencing harmonisation procedures since the presence of an existing requirement and test method may create a future barrier to trade scenario – see later.

As well as establishing the presence of any true ‘technical’ barriers to trade, TG 1 therefore also considered that other barriers to trade might exist which may not be under the usual definition of a ‘technical barrier’. In particular, TG 1 thought it necessary to investigate indirect technical requirements or barriers to trade that

might have an impact on construction products one way or another, especially if due to de facto regulations or national requirements. It was therefore considered relevant and useful to include in the report some examples of the various types of barrier to trade where they may directly impact the 'use' of a construction product in one or more Member States compared to the rest of Europe.

2.1.3 Barriers to Trade or Barriers to Use

Initial concepts of the different types of barriers in the market place were considered and some examples were provided to consultees to assist in their understanding of the issues and hence their responses. These included voluntary market measures and specific national requirements, whether notified regulations or recommendations. Market measures can become de-facto barriers.

Opinions on what constitutes a barrier to trade vary but national regulatory 'barriers' can be created within the European legal framework. Some regulations, such as the new REACH Regulation for health protection, provide common European levels of protection but the CPD defines Essential Requirements that are open to interpretation by Member States. Under Article 95 of the EU Treaty, the grounds for derogation from a harmonised level are strict, but greater freedom is afforded to countries when they implement non-harmonised levels of protection for health or environment in construction works. According to case law in the European Court of Justice, a measure should be proportional and reasonable, and it can take precedence over other regulations such as Public Procurement. A Member State may have a legitimate health and safety requirement based upon their perception of risk, which is different to that usually accepted in most other Member States. The Member State then notifies this proposed regulation and provided no justifiable and sustained objections are received from other Member States the regulation is adopted and then cannot be regarded as a legal barrier to trade, although it can create a distortion in the market place and possibly result in the creation of different products for each market area. It may also result in different certification requirements for a similar end use in different countries.

The Notification process (98/34 procedure) is seen as being complex for industry and in many cases is not understood. Failure of industry to ask their member state authority to raise objections (either due to lack of knowledge of the proposal, or due to lack of understanding) can result in 'approval' of the new regulation. When in force the industry only then sees the problem and encounters barriers to the use of their products. Even if objections are registered, they may not be considered sufficient to stop the implementation.

Alternatively, it has also been suggested that a similar type of Member State requirement, purported to be needed for health and safety reasons, and based upon a stated demand for a higher level of protection than that generally accepted in the EU, is actually a market protection measure to make the sale of cheaper imported products more difficult.² Such measures can be very difficult to identify and the health or environmental grounds for requiring levels of performance higher than those adopted for CE Marking in other countries may not be clear, but they would have the impact of raising the market price for affected products in the Member State by restricting free trade or use of products carrying CE Marking. This type of barrier has been justified in certain markets as a necessity to ensure that sufficiently high levels of quality are achieved. This questions a possible conflict between the meeting of CE Marking requirements – conformity with ER3 and minimum national legislation – and what is perceived by others as a 'minimum practicable level of quality'. The latter implies that unless a certain (higher) quality standard, or a certain level of conformity assessment (including third party factory control), is achieved, then long term product performance or safety will not be guaranteed. However, this still effectively constitutes a barrier to trade.

Within the scope of the mandate of CEN/TC 351, it would not have been possible to attempt to quantify the scale and impact of any measures such as the above, but it was felt that these issues could be explored in looking at consultees' perceptions about market measures. This, it was hoped, would give examples of the concerns, which may need to be addressed elsewhere.

² Note: This explanation is not universally accepted by Member States. An alternative opinion is that although Member States may be tempted to argue for restrictions allegedly based on health or environmental grounds to protect their home industry from imports, but such measures could also make it more difficult for the home industry to export their products abroad. Therefore, it is argued that disguised restrictions cannot generally be regarded as an attractive policy instrument.

2.2 Questions to Consultees

To establish the scale of standardisation work in the product area concerned, consultees were asked to list the presence of applicable harmonised or European test methods applicable. Non-harmonised methods were also reviewed.

From the presence or otherwise of harmonised product standards and/or test methods, consultees were asked to consider the existence of technical barriers to trade, either through the existence of multiple test methods (and hence multiple testing for the same product/application), or by lack of recognition of existing European or national test methods in a specific Member State, or by the demand to use specified nominated test laboratories to achieve certification for use for their product in that market.

Consultees were also asked to consider whether any de-facto regulations or market restrictions affected the sale or use of their products in one or more countries. Such de-facto regulations or market restrictions could be due to national worker protection requirements affecting the way in which a product may be used, or could be due to the national market demand for compliance with 'voluntary marking', quality schemes or certification marks leading to a perceived de-facto regulatory requirement. In such cases, there is no legal or technical restriction on a product which carries CE Marking but it becomes "normal" that only products carrying a certain additional mark (perhaps indicating higher or local quality standards) will end up being the only ones specified or requested by the market place.

3 Industry Groups

The following industry groups, selected by virtue of their interest in the work of CEN/TC 351, their product ranges and diversity, and their presence in European standardisation work, were contacted by mail and telephone to arrange their availability for interviews and/or written feedback on the issues of barriers to trade as required by TG 1 and the Mandate:

- BIBM – pre-cast concrete;
- BING – polyurethane foam;
- CEI-Bois – wood;
- CEMBUREAU – cement;
- CERAME-UNIE – ceramic industries;
- EAACA – aerated concrete;
- EFCC – construction chemicals;
- ERMCO – ready mixed concrete;
- EUMEPS – expanded polystyrene;
- EURIMA – mineral wool;
- EUROFER – iron and steel;
- EUROGYPSUM – gypsum;
- GEPVP – flat glass;
- TEPPFA – plastic pipes;

— UEPG – aggregates.

Other industry groups who became aware of the consultation process asked for specific information on their products to be included. These were:

- Euratex – flooring products;
- VIB – Association of Industrial Construction Raw Materials;
- EAA – European Aluminium Association;
- Pittsburgh Corning – cellular glass insulation manufacturers.

Furthermore, national trade associations from Switzerland and The Netherlands representing bricks and cement products respectively submitted comments.

Full details of all contacts are included in Annex 1.

4 Status of the Industry Consultations and Interviews

Considerable difficulty was encountered in getting responses to the requests for interviews and/or completed answers to the questions; the complexity of the subject and the short consultation time often being cited as a significant problem. Some groups requested a 3 to 6 month delay to consult within their membership and formulate responses through committees or product CEN/TCs. This was made worse by the fact that some product CEN/TCs only meet in plenary session every 12 to 18 months.

Subsequent telephone discussions and meetings with associations elaborated the feeling that barriers to trade appear minimal in areas where harmonised specifications exist, but in product areas where harmonisation is still incomplete, or only starting, the existence of national standards and test methods does cause problems. Despite this latter point, the status of harmonisation activities in CEN was not actually identified as the principle area of concern.

In terms of this current survey, many European trade associations are not finding any real 'technical' barriers to trade under the requirements of ER3, but rather find 'barriers to use'. Hence, some associations felt unable to offer significant contributions to the work of TG 1.

To date only three of the original trade associations selected have not provided formal responses. This brings the total number of replies within the original target of "not less than 10". Six further indirect responses have also been received from national or European associations, or from companies, who were not part of the initial consultation, but who felt that they had concerns or comments to raise. These have been added to the list of consultees in Annex 1A.

All written submissions have been followed up where necessary for clarification.

5 Results of Surveys

5.1 Perceptions of Barriers to Trade

The comments raised in this section are derived from, or constitute, actual remarks from some industry groups. They are individual's or industry's perceptions and do not necessarily reflect the situation in all Member States, nor the views of the Rapporteur, TG 1 members or CEN/TC 351.

It was interesting to note that, during discussion, some barriers to trade were identified but these technical issues were not resulting from health and environmental legislation but from other Essential Requirements such as energy economy or strength requirements. Hence, consultees were often aware of the concept and

presence of barriers to trade but by far the largest single response was that for ER3 there were very few real 'technical' barriers to trade that could be cited.

The overall perception was that, with the exception of a few countries, product technical requirements and associated test methods in technical specification that related to ER3 were limited. For harmonised technical specifications, the majority seem already to refer to the harmonised Annex ZA as agreed by the Commission and CEN as an interim measure. Furthermore, many national regulations do not call up specific product requirements but use regulation or building codes that set performance standards for the whole building, not the product, (one exception being the Dutch Building Materials Decree, BMD). A particularly good example of this is radioactivity (or radon) where national regulations often set performance targets, which need to be met wherever the building may be constructed. This allows for variations in the natural ground emissions of radiation in areas with (for example) volcanic rock substrata, and the resultant building techniques to control possible emissions.

This fundamental issue is also reflected in the Commission database of Regulated Dangerous Substances,³ which, although very substantial, contains substances listed mainly by only a small number of Member States (the majority from only two, Germany and the Netherlands). Other Member States, like the UK, legislate mainly on the basis of performance of the building, rather than what goes into the building.

Another general perception was that many of the current differences in market requirements were already accommodated by manufacturers who had become accustomed to tailoring their products and testing strategy for the different European markets in which they operated. This was demonstrated by a certain level of apathy to the questionnaire and whether barriers existed at all. However, it was also acknowledged that the removal of restrictive practices would make life easier and possibly improve competition.

Although the CPD, and much national regulation on building codes, relates to construction "works" – that is buildings and other construction elements – the works will only meet the Regulations when the products incorporated into the works meet certain minimum standards. Harmonised product specifications in CEN are derived from the requirements set out in national regulations and codes.

German and Dutch regulations and building codes seemed to present the biggest cause for complaint. One respondent stated, "A barrier to trade is anything requested by the German or Dutch authorities". The most commonly cited problem was the demand in (mainly in Germany and The Netherlands) to have testing carried out at specified laboratories⁴ before certification for use was granted. These tests had to be in addition to tests carried out for CE Marking and had to use national test methods, whether the methods were derived from harmonised European methods or not. There is also a requirement for attestation of conformity above that usually prescribed for the product.

A further issue was raised by several correspondents, that the publication of the European database on regulated dangerous substances may, in itself, stimulate the creation of new barriers to trade. Seeing the proliferation of substances and associated requirements could make national regulators openly question whether they too should be regulating such substances if they are considered dangerous in another Member State.

Concerns also varied according to the status of other research activities and regulatory development, including the introduction of REACH and research into indoor air at the ECB JRC, which is also Commission (DG Environment) funded. An Austrian producer summed up the situation regarding product for which harmonised technical specifications are still outstanding by saying:

"[What] we fear and we should be aware of is:

³ This database with Legislation on substances in construction products can be found at http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain_en.htm but at the moment it is still incomplete and a fuller version is only available to registered users on CIRCA. The relevant list of substances currently being examined as priority by CEN/TC 351 is given in CEN/TC 351 Document N 0054.

⁴ The laboratories may be specific identified national or private laboratories in the country of end use (thus refusing to accept mutual recognition procedures).

- That the bureaucracy for the precasters [precast concrete] will increase (and not get removed);
- Substances which exist in our "normal" environment will have to be tested in precast concrete elements;
- Unnecessary tests will have to be done;
- The costs for testing will increase;
- That concrete will be "tested to death" while other construction products (like timber) can do what they like".

This raises an emotive level of concern that there is, or may be, at least a perceived lack of level playing field regarding the treatment of some substances (products) in national legislation or as an indirect impact of new EU Regulation.

Part of the problem is the consultation process on new proposals. Some respondents expressed concern that it was difficult to influence new regulatory proposals. The European Commission carried out a survey of SMEs in 2004,⁵ which showed that, although results vary due to differing consultative procedures in the 25 Member States, consultations had significantly improved in recent years but that the level of business involvement into law and policy making differs from country to country and is relatively weak in some members. The main issue that business organisations faced during the consultation process was not enough time to prepare a contribution, not enough human resources, and not enough technical expertise, with several of the new member states less satisfied than the EU 15.

Furthermore, UNICE, in its 2004 report "It's the Internal Market, stupid! A company survey on trade barriers in the European Union", reported that "Overall, 65 of the 200 companies felt that the Internal Market had led to more regulation, due to detailed documentation requirements, national requirements remaining and increasing in parallel with EU regulations, different interpretation of regulation and new EU regulation in areas not previously regulated (e.g. environment)." (Source: UNICE 2004).

Since health and environmental protection legislation is included within the responsibilities of Member States and has, so far, been very limited in the scope of technical harmonization processes, there has been considerable opportunity for the creation of barriers through national legislation.

5.2 Barriers to Trade or Use

5.2.1 General

According to the OECD (Organisation for Economic Co-operation and Development), "Technical barriers to trade refer to technical regulations, minimum standards and certification systems for health, safety and environmental protection, and to enhance the availability of information about products, which may result in the erection of technical barriers to trade (TBTs)." It thus implies that any technical specification, regulation, limit value, or certification scheme can potentially lead to barriers to trade. This is a very general statement rather than a specific "definition" which could be applied to the technical barriers to trade resulting from Essential Requirement 3 of the CPD.

Construction products fall under the CPD, which deals with compliance of products with the Essential Requirements (ER) at the moment the product is first 'placed on the market'. Compliance with the Essential Requirements allows products to be legally sold without further restrictions, but this does not say that products will actually be used. So, in such circumstances, where a producer believes his CE Marked product may not be 'used', he will not export to that market if he does not want to incur the additional costs (e.g. for manufacture or test or compliance certification). CE Marking is a conformity mark with the CPD and not a quality mark. The easiest way to demonstrate compliance with the ERs is to test against a harmonized

⁵ European Commission (2005), Consultation with Stakeholders in the shaping of National and Regional Policies Affecting Small Business: Final Report of the Experts Group. Brussels, p.5-6.

technical specification and to affix CE Marking to the product (or packaging). This removes the need for further checks by market surveillance authorities and should constitute an open European market for the products. But in some markets, and for some types of products, it does not enable the product to be used in any particular application without obtaining additional application approvals or marks, such as national or private quality marks or compliance with insurance certificates (for example, it is considered imperative by UK builders that thermal insulation for use in masonry cavity walls has an Agrément Certificate, and, in other areas there is a growing demand for environmental certification or environmental profiles). These are often seen as barriers to 'use' rather than a technical barrier to trade.

Only in the case of 'public procurement' was CE Marking alone once considered sufficient. Although this is still generally true, case law in the European Courts has established that member states can argue for health or environmental protection to allow further demands over and above the CE Marking.

A subject of considerable debate in some countries prior to the commencement of the CEN/TC 351 work was whether or not there were any technical barriers to trade in construction products, and whether a technical barrier to trade could only exist where there were two or more regulations and/or associated test methods for the same requirement (thus possibly requiring products to be tested more than once to be sold anywhere in the EU). This had implications as to whether there was, indeed, a harmonisation process for CEN/TC 351 to complete. But, regardless of this, as stated in the preamble to this report, the European Commission had also indicated that it was interested in all forms of barriers and whether a single requirement constituted a barrier to trade (or potential barrier).

This report has thus looked at the scenarios of both two or more requirements and the presence of only a single requirement and the implications of each for the work of CEN/TC 351, and provides examples of each.

5.2.2 Current Regulations – two or more Member States

A technical barrier to trade which results from the presence of several test methods for one product property is the most relevant and usual example of a technical barrier to trade and therefore, by definition, **requires the presence of two or more requirements, each with their own test method**. Hence, it could be assumed that a technical barrier to trade only exists with two or more methods for the same product property. The presence of two or more methods clearly also creates a requirement for harmonisation of the (several) methods into a single European harmonised test specification which incorporates all of the appropriate levels or classes of performance demanded by each of the original national methods or regulations. It has also been argued that the actual creation of a new national requirement or regulations, does, in itself, create the framework for creating new technical barriers.

5.2.3 Current Regulations – single Member State

It can, however, be seen that in some circumstances the presence of a single national test method for a given property may eventually result in a real barrier to trade in the future, if, for example, another Member State decides to legislate for the same property. This new regulation may have its own classes of performance or limits based upon a different test method. So addressing the single existing national method and considering the 'harmonisation' of that method to produce a new European Harmonised test could prevent the formation of new barriers to trade in the future since the harmonised method should be adopted by all national regulators in the future.

5.2.4 Barriers to Use

Many bodies cited examples where their products were manufactured to be in accordance with harmonised CEN specifications, or in some cases with European standards, but to use the product in a certain country or in a certain region additional tests or certification hurdles had to be overcome. Hence, although CE Marking was available, and the product could be "placed on the market", it did not offer any guarantee that it would be specified or used. These barriers to use may be through the presence of national quality marks, "voluntary" environmental marks or other measures, which are imposed or "requested" by the local competent authorities, or other third parties.

A barrier to use may even be a system agreed within the industry to raise the overall performance standard for a type of product where the industry did not feel that existing European levels of control (such as attestation of conformity) were sufficient to ensure adequate safety in use against inferior products entering the market. Any producer not part of the agreement could then find it difficult to achieve acceptance of their products on the market unless they adopt the more stringent requirements and possibly certification.

5.2.5 Summary and Definitions of Barriers

The definitions and the boundaries of different forms of “barriers” has been the subject of considerable debate and confusion. There are no universally adopted definitions that specifically apply to this area of work although some international definitions, such as the OECD, do provide a starting point for explaining conventional forms of barriers. It has been concluded by the Task Group that within the scope of the CPD and construction product’s markets there is a hierarchy of barriers affecting construction products and CPD ER3 as follows:

- a) Technical Barriers to Trade – Non-harmonised technical regulations, minimum standards and/or certification systems for health, safety and environmental protection, which result in the erection of barriers to inter-state trade. Technical Barriers to Trade may prevent a product being legally placed on the Market. They may result from the imposition or use of legally adopted national regulations.
- b) De-facto Barriers to Trade – National or local requirements, minimum standards, or approvals, over and above those demanded and harmonised at the European level, that relate to the application or the use of products when placed on the Market. De-facto barriers to trade do not prohibit the legal placing of products on the Market but may result in them not being used or specified.
- c) Barriers to Use – National, local, or industry initiatives, schemes or recommendations, which are not mandatory, but which become accepted or demanded as a minimum requirement for products being placed on the local market. Barriers to Use are often based upon voluntary certification or approval schemes, labelling or information requirements.

5.3 Examples of Barriers

5.3.1 General comments

The Dutch Building Materials Decree⁶ (BMD, “Bouwstoffenbesluit”, 1995 / 2005, in force since 1999) is an example of a national regulation that results in barriers to trade.

Since it is named by several product representatives, it seems useful to explain the principle outline of it:

- The Building Materials Decree (BMD) is a national and legal regulation in The Netherlands based on the Law for Soil Protection;
- It covers all ‘stony’ construction materials (both solid and granular) as well as earth and sludge;
- It is linked to outdoor scenarios of application (run-off to, permanently or temporarily in contact with soil, ground and surface water and as special scenario an isolated application on the soil);
- The requirements to the construction materials are derived from emission and content of 38 substances (19 inorganic and 19 organic) for which limit values are set in 3 levels related to the application scenarios;
- For the assessment of conformity both certification of the product (more or less level 1+ CPD) and batch testing are appointed as legal means of proof;
- National (Dutch NEN) test methods on leaching (inorganic substances) and content (organic substances) of substances apply;

⁶ Note – due to be replaced by the Soil Quality Decree.

- The private certification schemes are executed by NL-accredited institutes and NL-recognised laboratories according to the national Accreditation Programme AP 04.

The Dutch authorities have announced the publication of the new Soil Quality Decree due for late 2007 or early 2008, as a renewal of the BMD. The principal differences of this new regulation are:

- The separation of construction materials with only general limit values on the one hand and earth and sludge on the other, for which different levels related to the use of the soil and even local circumstances apply. Granular materials such as sand and gravel are defined as earth;
- The application scenarios for construction materials are reduced to 2 types (temporarily contact deleted);
- A 3rd option for the AoC is introduced, the producer's declaration based on a ITT and linked to an obligatory FPC;
- Individual producer's with a certified product need to apply for an authorisation, issued by Bodem+ (Soil+, an agency from the Ministry of Environment) with a declaration of good behaviour.

For example, the sale of ready mixed concrete for use in external applications (in contact with soil, rainwater or groundwater) from Belgium to the Netherlands first requires the pre-certification of the proposed mix, which has to be carried out using Dutch methods and usually also at a Dutch laboratory (although some national laboratories are available as an option on the basis of mutual recognition)

From an alternative perspective, the Dutch Decree has recently been cited by one source as a 'license to use' a product. This relates to products made from or containing secondary materials or waste. Waste would often be restricted for sale or subject to bans, but compliance with the Dutch Decree allows the use of the product in works.

Other restrictions, resulting from national regulations, are found to exist which affect the use of specific products. These regulations can apply penalties to measured performance of products, but some Member States also have lists of 'banned' substances, that is to say substances that they prohibit from use in products, which are being placed on their markets – on health or worker protection grounds. As CEN standards have not addressed this issue, the situation will arise where a construction product that is CE-marked is banned from being placed on a particular market (because it contains a nationally banned substance). This can also be regarded as a barrier to trade. This is an issue for the Commission and the Standing Committee for Construction to resolve.

For example, some mineral wool thermal insulation products carrying CE Marking and conforming to EN 13162 that can be sold and used in any Member State of the EU are not allowed to be sold or used on the German market due to local restrictions.

For indoor air emissions, formaldehyde is a substance that is used in a number of products and which is specified in ER3 as a substance to be considered within a number of product specifications. However, there are a number of different test methods used, according to the product type or according to the presence of different regulations, which can set various levels of performance demanded in Member States. The timber and flooring products appear to be affected to the greatest degree but the extent of the problem has been difficult to verify through consultation.

From a regulatory review, a recent example of wood based products conforming to EN 13986 shows that two classes of performance are possible, E1 and E2 and both of these allow CE Marking of the product. However, in Austria and Germany class E2 is not permitted on the market. This has been dealt with by the Commission and CEN by recommending the addition of wording in the product specification, which states "In certain countries only products of class E1 are allowed". This text is, for example, in Annex B of EN 13986:2004 (Wood-based panels for use in construction – Characteristics, evaluation of conformity and marking) which gives the test method for measurement of formaldehyde emission. Similar texts are used in other standards including EN 14041 (Resilient, textile and laminate floor coverings – Essential characteristics) and in EN 14342 (Wood flooring – Characteristics, evaluation of conformity and marking). Regulations on formaldehyde also exist in Denmark and Sweden. Even though such requirements have a degree of harmonisation with respect to methods and classes, they can still be considered as a barrier to use.

Similar concerns about de-facto regulatory barriers have also recently been lodged with the Commission by the copper and zinc industries. Germany and the Netherlands have notified regulations recommending that designers and construction companies should refrain from using either zinc and/or copper for roofing and rainwater disposal products, or that specific measures are included for rainwater treatment from large buildings. It is understood that in the Netherlands there are also local requirements (local authority) which stipulate similar restrictions where there is a strict requirement for drinking water. This is being reviewed by the Commission.

Finally, the Drinking Water Directive has also been cited as an example of a barrier to the use of products in some Member States – although all products carry CE Marking, the plethora of different requirements in different countries means that some products will not be acceptable in some countries.

5.3.2 Specific product Group Issues

5.3.2.1 Cement

Cement is worth of mention as it is also unusual in standardisation terms. Cement (as a product) is not in contact with the environment but is a constituent of many products, some of which are subject to harmonised specifications and others, such as ready-mixed concrete, which are not. Cement, as such, is regarded by the industry as having no barriers to trade, but under an amendment to the 76/760/EEC, marking and use directive, there is a limitation of 2ppm for chromium VI. This limit does not apply in 'closed' systems where cement cannot be in contact with the skin. This not a CPD issue as such but is seen as a problem for cement based products according to some national regulations. Cement is used not only for precast concrete but also for ready mixed concrete and structural concrete, the latter being the subject of a European norm, EN 206-1, but this is not harmonised, and for a variety of mortars. Ready mixed concrete is not harmonised but is subject to various performance standards and requires pre-certification before being able to be delivered into the Dutch market. This testing usually has to be under a Dutch laboratory, such as KIWA, which in itself presents enormous problems for this type of product. A precast or structural concrete element can be delivered and pre-tested more easily against a specific recipe. Cement producers are concerned that there is a lack of level playing field, which is a barrier to trade, not only according to the destination country but also according to the product used, irrespective of the fact that the final construction element may be the same.

5.3.2.2 Thermal Insulation

In CEN/TC 88 there are 19 working groups dealing with a vast variation in product types, so the range of issues can also be large. Hence, for this survey, three different product groups were selected, mineral wool, polyurethane foam and expanded polystyrene – these represent the largest shares of the building insulation market. At the moment, only factory made products are standardised in the series of product standards from EN 13162 to EN 13171. Standards are being developed for in-situ formed insulation materials and also for 'industrial' or 'technical' insulation products.

For mineral wool products there are no practical barriers to trade since the only regulation that affects the market is the German Chemical Ordinance. In addition to meeting the technical requirements of EN 13162, all mineral wool thermal insulation also comply with Note Q of the Dangerous Substances Directive, which exonerates them from being considered as a possible carcinogen. All EURIMA member companies, who compiled this reply, comply with this Note Q and thus have no market issues. Compliance with this Note does not, however, allow compliance with the German Chemical Ordinance, which, for worker protection requirements, stipulates a much more stringent health classification and demands compliance with one of a number of additional tests. Meeting these additional German regulations requires a different type of product to that sold freely in all other EU Member States, but manufacturers state that this is not a significant problem.

Expanded polystyrene manufacturers (EUMEPS) make building insulation, but also make products for engineering applications and lightweight fills. They report no barrier to trade issues for their products. They advise that EPS is a polymerised clean monomer and contains no (or only traces) of substances on the EC Indicative List of Substances. EPS products meet all existing EU wide requirements for these substances. As mentioned in a general comment earlier, however, EUMEPS are concerned about the continued demands for use of national quality certification marks like German technical approvals (Zulassungen), Agreement Certification, and French ACERMI rules, even if these are currently limited to general product requirements.

As long as there are no European requirements for ER3 then there are notified national technical requirements in Germany for Ü-Mark certification for some products.

BING, representing the polyurethane manufacturers reported that they have nothing to contribute since they do not see barriers to trade for polyurethane products.

One of the largest cellular glass insulation producers reported that:

“Recent studies in Germany on indoor climate emissions have [sic] shown that for cellular glass no VOC-emissions are measured. Also in respect of the cellular glass production, no metal fractions, nor other dangerous substances on the EC Indicative list of Substances are used and consequently cannot be emitted to the indoor climate.”

They also reported that they believed that for cellular glass thermal insulation (covered by CEN product standards EN 13167 and prEN 14305), used as thermal insulation as part of the building envelope and building equipment, there are no barriers to trade.

5.3.2.3 Concrete and pre-cast concrete products

See comments above for cement. In addition, one respondent reported specifically on the Dutch Building Materials Decree (BMD, 'Bouwstoffenbesluit') stating that:

- a) Tests have to be carried out by an AP04 certified laboratory (Dutch document). There are two laboratories in Germany that are AP04 certified as well.
- b) That gypsum (products) are excluded. This due to the application of these products inside buildings rather than outside.
- c) The (leaching) tests are Dutch. Although in CEN/TC 292, tests are being developed similar to the Dutch tests, at present most 'Bouwstoffenbesluit' tests are on the basis of Dutch protocols.

This presents a different market requirement for differing product types and also a barrier for foreign producers to achieve certification in their manufacturing country.

Meanwhile, no reply has been received from the autoclaved aerated cement based product manufacturers so no comment can be offered for this product area at the moment.

The CEN Technical Committee CEN/TC 104/WG 14, which is the horizontal environmental committee for all concrete related products, is considering whether further detailed replies can be submitted but this could only be in the latter part of the year after meetings have taken place.

5.3.2.4 Gypsum products

Eurogypsum reports that no barriers to trade are known to exist for their products. This appears confusing when compared to the lists of substances in the Commission database that apply to single national requirements, such as the Netherlands. The possible differences of opinion between the database and industry perceptions may need to be examined in more detail, not only for gypsum products but as a general issue, but may be due to the different end use applications of the products (internal versus external).

5.3.2.5 Bricks and blocks

Brick and block products comprise clay based, cement based and calcium silicate materials. Some products are based upon natural materials while others may incorporate additives and may be subject to specific processing, such as autoclaving. At this moment, it appears that few barriers to trade exist for bricks made from clay, or for other construction products made from clay (such as roof tiles). However, the following issues have been identified by Cerame-Unie:

"The "Indicative List of the RDS" of CEN/TC 351 contains some substances according to the German Notifizierung 2006/90/D "Principles for assessing the effects of construction products on soil and groundwater". This evaluation concept is valid for products on the basis of a national approval, because their composition is considerably different of standardised products. This evaluation concept is not valid for well-proved products that are normative construction products. The notification process is also not yet finalised. There is a clear disapproval from the German Industries in particular the lists of threshold values for the essential inorganic and organic parameters that may be contained in construction products (Table D.1 in Annex I-D). For example, the value for Vanadium of 4 microgram per litre is unacceptable. The second aspect is the site for compliance with the insignificance thresholds. The construction product is placed above groundwater, i.e. above the highest anticipated groundwater level; the substance input into the groundwater occurs from the unsaturated zone. In order to ensure that the precautions stipulated under water law are taken for the groundwater, gravitational water must already comply with the insignificance thresholds at the lower edge of the construction product. This will create an adequate safety margin in the gravitational water when it reaches the groundwater before the possible onset of groundwater contamination.

For the evaluation of masonry units' relevant regulated dangerous substances, the experience with the Dutch NL-BSB Certification should be taken into account. CEN/TC 125 should ensure, that all existing demands currently required for the environmental behaviour for construction products (for example the Dutch NL-BSB Certification) should be included in the CEN/TC 351 discussion, so that the future evaluation scheme to the "Essential Requirement No. 3" includes all national aspects and additional national certification is no longer required."

Cerame-Unie reported that brick paver manufacturers in the UK are expected to fund an inspection visit to the UK from Dutch Inspectors every three months, a visit that lasts 3 days – this is similar to the situation reported on the Dutch Building Materials Decree (BMD) and the voluntary situation in operation in plastic pipes (see later).

5.3.2.6 Glass

Flat glass products are mainly considered to be inert and probably have no relevant releases of dangerous substances. However, a range of special glasses and coated products may need further review.

5.3.2.7 Aggregates

At the time of writing, the European Association UEPG has consulted with its members but has been unable to elicit replies. In discussion, it was suggested that it was not technically easy to answer, or that the majority of products on the market were natural materials with no problems. The aggregates industry and its CEN Technical Committee has meanwhile shown that many of its products would probably not be subject to harmonised routine testing for release of dangerous substances in light of the knowledge of how limited any such releases would be.

5.3.2.8 Fly ash and aggregates

Another association gave a review of the Dutch Building Materials Decree (BMD), which has already been covered in the general introduction above. Their comments included concerns over fly ash, or, more specifically, uses of fly ash. EN 450 deals with fly ash.

European Standards EN 14227, parts 2, 3, 4 and 14, are applicable for fly ash. Other secondary materials like furnace slag, phosphorus slag, bottom ash and products from the drinking water preparation are also all applicable under the Dutch BMD, partly in isolated use (with no risk of contact with soil or ground water).

For these products the BMD is regarded as a 'licence to use' because of the requirements which address full performance in outdoor use regardless of the origin and character of the product, in terms of properties meeting the environmental requirements. The BMD requirements are performance-based and not prescriptive.

EN 13383-2 deals with Emission to soil and (ground) water from construction materials for inorganic parameter, also for the content of organic parameters and for the content of inorganic and organic parameters

in sand, gravel etc. But for the Dutch market a series of Dutch standards apply for the sampling, leaching and content testing of inorganic and organic substances, including, among others:

- NEN 7373:2004 Determination of the leaching of inorganic components from granular materials with a column test;
- NEN 7383 (simplified procedure of the column);
- NEN 7300 series (Sampling), NEN 7310 series (Sample pre-treatment).

5.3.2.9 Timber Products

CEI-Bois is seriously concerned that the work of CEN/TC 351 may lead to an additional burden of testing and verification on producers of wood and wood-based products, especially considering that the database set up by the services of the European Commission also includes substances for which there is no regulation at present.

The database of the EU contains various substances found in wood preservatives used to enhance the durability of wood and to prolong the service-life of wood products. The use of such products is regulated strongly already at national and especially European level, e.g. through EU directives 76/769 on the marking and use of dangerous substances and the biocidal products directive 98/8. In spite of these European provisions, some Member States (such as the Netherlands and Denmark) are working towards further restricting the use of certain substances. The evaluation process of all currently available substances for wood preservation under the BPD should be sufficient in order to avoid any unnecessary barriers being drawn up.

ER3 requirements are already met and found in several harmonized standards for wood products. EN 13986 on wood-based panels, e.g. contains requirements with regard to formaldehyde with two different classes: E1 and E2. Some Member States already require E1 level products only.

The E1 and E2 scheme for formaldehyde emission is also taken over by other harmonised standards, such as EN 14342 for wood and parquet flooring. The latter standard also refers to other substances, such as PCP and asbestos, though these are not considered directly relevant any longer. Requirements on the determination and declaration of PCP are found in EN 13986 as well.

The wood industry has strongly objected to the introduction of a certification scheme in Germany, the so-called AgBB that refers to emissions from volatile organic compounds, VOC, from construction products. Certain types of VOC are found in wood products by nature, and are not resulting from the production process of the product. Nevertheless, they would have to be taken into consideration in the final calculation of any possible emissions, which could lead to the result of penalizing natural products. Furthermore, in the absence of scientific data, some of these natural compounds were classified with very high safety factors, resulting in wood products failing to meet the AbBB requirements due to their emission.

The AgBB is considered as posing an immediate barrier to trade for many products and as being incompatible with the current harmonization approach of the CPD. Similar attempts in France are followed with due attention.

The existence and prescription of national quality marks in official tenders, such as CTB+ in France for treated timber products and KOMO for specific products in the Netherlands, also lead to de facto trade barriers.

In addition to the examples listed above, trade in wood and wood products is more and more impacted by demands in the field of public procurement going beyond the current regulatory requirements. These e.g. relate to the sustainable origin of the timber, stricter limits for formaldehyde and VOC release etc.

5.3.2.10 Metals

For now, no response has been received from Eurofer, the iron and steel association, but a different product group, the European Aluminium Association (EAA) has responded. EAA represents products in windows, curtain walls, doors, facades, cladding, roofing, shutters, suspended ceilings, structures and some more.

Concerning the dangerous substances aspect, they are not aware of any trade barrier at present, but have launched an enquiry among its members to obtain a more complete picture.

As a complication, a big share of the EAA market has just started CE marking on 1 February 2007 (windows and doors), so they ask for some more time to examine the impact. Some other markets for EAA products have not even finalised the relevant product standard (structures).

5.3.2.11 Plastic pipes and fittings

TEPPFA's formal position is that there are no barriers to trade for their products associated with ER3.

However TEPPFA has agreed that they have a voluntary standard for their products and it is the opinion of the members of CEN/TC 351/TG 1 that this constitutes a barrier to use.

A voluntary standard and quality mark for plastic pipes has existed for some time, but this does not appear to address any issues related to release of dangerous substances. A more recent harmonised standard (or standards) for CE Marking incorporates some of the requirements from the voluntary standard but, again, currently makes no reference to specific requirements for dangerous substances.

The following is the TG 1 members' reflection on the issues established during discussions and is included in this section as the issues raised by standards for plastic pipes demonstrates a general point believed to be relevant in other areas too.

Although requirements are not relevant for ER3, it is interesting to note that voluntary standards are preferred and promoted to ensure higher levels of performance in application. They also recommend testing and certification systems that demand specific testing and certification levels beyond those usually adopted in EU member states, being equivalent to System 1+. According to the industry, this approach is not intended to create market distortion or trade barriers but simply an effort to raise minimum performance levels across European markets with the eventual objective of harmonisation and recognition of these higher levels – believed to be necessary. However, this questions the principle of the current minimum levels of attestation set within the harmonised standards through the Essential Requirements and mandates and, of course, CE Marking itself. If the levels (for any requirement, whether ER3 or any other ER) are set too low, this implies a risk which CE Marking is supposed to avoid.

TG 1 acknowledges that nothing in the information supplied, or in the follow up discussions with TEPPFA, shows or suggests that barriers to trade actually exist within the framework of ER3, but this topic is left in the report to provide an example of how industry efforts to achieve a high level of product performance could potentially create a framework for future barriers to trade or to use. If high levels are required, eventually even for ER3, then they should be addressed in the test methods, classes of performance, and the harmonised technical specification and linked to EU or national requirements. If differences continue to exist or higher voluntary marks promoted then they will create or sustain barriers to use in the market place.

5.3.2.12 Construction Chemicals

Under the sector organisation EFCC (European Federation for Construction Chemicals), a range of products and application areas exist. These include adhesives, admixtures, concrete protection and repair, floor screeds, and waterproofing. A number of hENs exist for these products.

Although EN 13813 lays down the criteria for floor screeds, additional requirements are demanded for floor screeds using synthetic resin as a binder on the German market when used in indoor applications. The DIBt Guidelines for indoor air require a conformity assessment similar to level 1+ for emissions such as TVOC and SVOC. Although this is a perfectly legal procedure for a Member State, it can be perceived to be a hindrance to the use of products and thus a barrier to use.

The sector also reports that specific national requirements exist which pose de-facto barriers. The French classification of formaldehyde as a category 1 carcinogen in 2006 places barriers to the use of certain formaldehyde containing products.

In addition, so-called “voluntary” marks for concrete admixtures conforming to EN 934 are effectively demanded in the Netherlands (KOMO Certificate – AoC level 1+), Belgium (BENOR Certificate – AoC Level 1+), and the French NF Marque.

5.3.2.13 Resilient, Textile and Laminate Floor Coverings

These products fall under CEN/TC 134 and the European Association Euratex. Although not part of the original list of candidates for survey, they were aware of the work through CEN/TC 351 and submitted their own comments as they had concerns that some products were subject to discrimination and barriers to trade.

In Germany, the products fall under the technical approval, the so-called “Bauzulassung”, which will eventually cover all building materials. Since the end of 2005 a new standard, EN 14041, has set down the requirements for textile and resilient floor coverings, and the co-existence period ended in January 2007, although Germany felt that the harmonised standard did not meet their national requirements for ER3. Because of this, in Germany, the products of CEN/TC 134 are required to meet additional emissions certification since January 2007 while competing products such as wood, parquet etc., are currently free from this system. Similar requirements will exist from March 2009 when the co-existence period for parquet products comes to an end.

The industry also believes that a similar system is being prepared in France, which means that there could be duplication of testing requirements to comply with the two systems.

In both cases, these issues constitute barriers to trade in a product area, which is subject to significant standardisation, with more than 100 published standards.

6 How Standardisation can remove barriers to trade

It is apparent that few technical barriers to trade currently exist, which are due to the presence of two or more different test methods, so it would suggest at first glance that CEN/TC 351 can do little to eliminate existing barriers to trade by harmonisation of test methods. However, it also appears that some product areas are still not harmonised and national or non-harmonised CEN standards exist.

Despite the low level of true technical barriers to trade, the presence of any non-harmonised test methods indicates the potential for future barriers to trade if another competing method or requirement for the same product or substance were to be developed elsewhere. This would be sufficient to instigate harmonisation work on the existing test method (or the sampling, analysis or calculation procedures if relevant), so as to prevent development of further contradictory methods in the future. This is defensive harmonisation work and is a clear benefit of the CEN/TC 351 work programme. Overall, the survey has indicated that harmonisation activities covered by Mandate M366 would be beneficial to the construction products’ market in the EU.

Much of the work of CEN/TC 351 will only produce quantifiable benefits if the harmonised methods are also clearly linked to a mutual recognition scheme for competent laboratories so that the testing of products to these methods can be carried out at a national level, with local surveillance schemes (if and when necessary).

This report, being a snapshot of the market situation, cannot list all of the specific test methods that are presenting current or potential barriers to trade, but the work of CEN/TC 351/WG 1 and WG 2 has identified most of the existing methods and the technical report on concepts of horizontal testing (also known as the TR 2 report) from CEN/TC 351/TG 2 provides further insight into the scope of the harmonisation activities.

A further significant issue, which requires greater analysis than that covered by the existing TG 1 scope, is the number of de-facto barriers that exist in the European market, even though many were originally developed as voluntary schemes or for the purposes of worker protection. It may be appropriate that an extension to the TG 1 work to investigate de-facto barriers and voluntary schemes in more detail would be helpful. Then the barriers to “use” as opposed to barriers to “trade” can be quantified and an assessment made of the benefits of increasing the scope of testing under ER3 to include justified requirements not currently within ER3. One further possibility would be to examine this in line with possible scenarios for revision of the CPD and, for example, REACH.

7 Conclusions

7.1 Barriers to Trade

Very few real technical barriers to trade have been identified, especially regarding barriers resulting from two or more test methods. Thus it appears at first glance that there is little role for CEN/TC 351 to harmonise existing methods. Anecdotally, this conflicts with the apparent presence of a large number of requirements that are linked to two member states, which could imply two or more test methods in existence. However, it is also clear that the very existence of a large number of individual requirements and associated test methods, such as those from the Dutch Regulations (Building Materials Decree and, more recently, the Soil Quality Decree) could lead to future real technical barriers to trade unless the existing methods are turned into harmonised methods in the interim period.

Like the Dutch Regulations, the German DIBt Guideline on indoor air, based on the AgBB scheme (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten – Committee for Health-related Evaluation of Building Products) sets limits for emissions of VOCs and SVOCs from building materials in the indoor environment. It also sets LCIs (Lowest concentration of interest) values for substances.

Coupled with associated test methods and certification schemes, no matter how well justified, these types of national schemes set barriers for some producers who wish to export their products to these countries. Harmonisation of test methods in CEN/TC 351 will only be beneficial if the national schemes, such as these, adopt the harmonised methods in their entirety and also adopt mutual recognition of tests from other Member States.

7.2 Barriers to Use

The first surprising conclusion is that barriers to **use** are far more predominant than technical barriers to **trade**. It would appear impossible to completely eliminate 'barriers to use' since they often result from legally established national requirements or, even, European Directives. It is also difficult to see how CEN/TC 351 could eliminate barriers to use since it is more a political initiative than a technical harmonisation one.

Barriers to use or barriers to trade are also sometimes supported or instigated by some stakeholders within industry as a means to protect markets from what they consider to be inferior products or to artificially raise product performance levels. Various voluntary schemes have the habit of becoming de-facto market requirements at which point they are a barrier to use, if not a real barrier to trade. With increasing emphasis on environmental matters – climate change, eco-toxicity, and sustainability – there is a natural trend for legislators or environmental groups to increase the burden of requirements which are intended to mitigate these environmental factors. However, it can have the potential to increase barriers to use, even if voluntary.

This complex area of barriers to 'use' rather than 'trade' was not expected to be so significant and although some examples have been given in this report, the Task Group believes it could merit further investigation, but this is beyond the scope of the current work programme.

7.3 Limitations

This report is only a snapshot of the European market situation regarding barriers to trade and barriers to use. The scope of the work was deliberately limited to make it manageable within the timeframe allowed for the mandated CEN/TC 351 work programme. However, the general observations recorded from interviews with consultees do show that the CEN/TC 351 work, if fully implemented, will reduce or prevent some barriers to trade.

8 Recommendations

8.1 CEN/TC 351 should continue its current work programme to identify all known national and international test methods for measuring emissions and/or releases of regulated dangerous substances to either indoor air or to soil or groundwater scenarios in so far as these are, or have the potential to be, Technical Barriers.

8.2 CEN/TC 351 should identify any cases where two or more methods exist for measuring a similar property or substance, and work towards harmonisation of the methods. It should also examine any single test methods used or demanded in any Member State and ascertain whether the production of a harmonised method for that substance, property or requirement would be beneficial.

8.3 The production of harmonised methods identified above would provide a platform for the elimination of existing technical barriers to trade and help prevent the creation of new technical barriers to trade.

8.4 To achieve benefits of the harmonisation activities, a system of mutual recognition of test results from suitably qualified competent laboratories should be established for any testing requirements under ER3.

8.5 CEN/TC 351, through this report, has also identified that numerous other instruments, either of a voluntary nature or a de-facto market demand, are limiting the free use of certain products in certain markets. Some of these barriers to use are effectively operating as barriers to trade but cannot be simply resolved by technical harmonisation. Some may be limited or removed by instruments such as mutual recognition or by political intervention.

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Annex A

(informative)

Lists of Associations, contact details and product specifications

Acronym	Name	Address	Phone/Fax	E-mail	Product Specifications	
					Products	Specifications or CEN/TC
BIBM	«Job Title»	Rue Volta 12 B-1050 Brussels	Tel «Business Phone» Fax «Business Fax»	«E-mail Address» http://www.bibm.org ar@bibm.org	Precast concrete	TC 229 TC 104/WG14 ⁷
BING	Federation of European Rigid Polyurethane Foam Associations	Avenue E. Van Nieuwenhuyse 6 B-1160 Brussels	Tel +32 2 676 72 71 Fax +32 2 676 74 79	secretariat@bing-europe.com	Polyurethane foam	
CEI-BOIS	European Confederation of Woodworking Industries	Allée Hof ter Vleest 5 B-1070 Brussels	Tel +32 2 556 25 89 or + 322 556 25 85 Fax +322 556 2595	info@cei-bois.org	Timber and timber panel products	TC 112 EN 13986 TC 175 and 124 TC 38 (durability)
CEMBUREAU	The European Cement Association	Rue d'Arlon 55 B-1040 Brussels	Tel +32 2 234 10 39 Fax +32 2 230 47 20	general.secretariat@cembureau.eu intelligence.unit@cembureau.eu	Cement	TC 51 EN 197, EN 143 EN 14216, EN 14647

⁷ WG14 is the policy group for ER 3 related issues for the 'CEN concrete sector' and is providing co-ordinated reply for all forms of concrete.

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Acronym	Name	Address	Phone/Fax	E-mail	Product Specifications	
					Products	Specifications or CEN/TC
CERAME-UNIE	Liaison Office of the European Ceramic Industry	Rue des Colonies 18-24, box 17 B-1000 Brussels	Tel +32 2 511 3012 Fax +32 2 511 51 74	info@cerameunie.net or tec@cerameunie.net	Clay bricks and tiles, ceramic tiles, clay pipes and sanitary ware	
EAACA ⁸	European Autoclaved Aerated Concrete Association	Dostojewskistrasse 10 D-65187 Wiesbaden	Tel +49 611 850 86 Fax +49 611 80 97 07	info@bv-porenbeton.de or hartmut.walther@xella.com		
EFCC	European Federation for Construction Chemicals	Avenue E. van Niewenhuyse 4 B-1160 Brussels	Tel +322 676 7249 (Cornelia Tietz) Fax +32 2 676 73 32	info@efcc.be uwe.holland@basf.com gloeckner@vci.de	Adhesives for tiles Admixtures for concrete Protection and repair of concrete Floor screeds Liquid waterproofings	EN 12004 EN 934 EN 1504 EN 13813 ETAGs
ERMCO	European Ready Mixed Concrete Organisation	Rue Volta, 8 B-1050 Brussels	Tel +322 645 52 12 Fax +32 2 735 14 67	secretariat@ermco.org jgibbs@ermco.org	Concrete (in-situ, i.e. fresh, wet ready-mixed and site mixed)	TC 104 EN 206
EUMEPS	European Manufacturers of Expanded Polystyrene	Avenue Marcel Thiry 204 B-1200 Brussels	Tel +32 2 774 96 20 Fax +32 2 774 96 90	eumeeps@kelleneurope.com	Expanded polystyrene	EN 13163 EN 14933 EN 14309
EURIMA	European Insulation Manufacturers Association	Avenue Louise 375, box 4 B-1050 Brussels	Tel +32 2 626 20 90 Fax +32 2 626 20 99	info@eurima.be or alain.herssens@eurima.org	Glass wool, rock (stone) wool insulation	EN 13162 (uses annex ZA1)

⁸ No response.

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Acronym	Name	Address	Phone/Fax	E-mail	Product Specifications	
					Products	Specifications or CEN/TC
EUROFER⁹	European Confederation of Iron and Steel Industries	Rue du Noyer 211 B-1000 Brussels	Tel +32 2 738 79 20 Fax +32 2 736 30 01	g.paul.eurofer@t-online.de		
EUROGYPSUM	Association of European Gypsum Industries	Boulevard Silvain Dupuis 233/124 B-1070 Brussels Belgium	Tel +32 2 521 38 90 Fax + 322 524 45 75	info@eurogypsum.org or christine.marlet@eurogypsum.org	Gypsum products	
GEPVP	European Association of Flat Glass Manufacturers	Avenue Louise 89 B-1050 Brussels	Tel +32 2 538 43 77 Fax +32 2 537 84 69	edwina.bullen@gepvp.be or info@gepvp.org	Flat glass	
TEPPFA	European Plastic Pipes and Fittings Association	Avenue de Cortenbergh, 66 B-1000 Brussels	Tel +32 2 736 24 06 Fax +32 2 736 58 82	info@teppfa.org		
UEPG¹⁰	European Aggregates Association	Rue d'Arlon 21 B-1050 Brussels	Tel +322 233 53 00 Fax +32 2 233 53 01	secretariat@uepg.eu		

⁹ No response.

¹⁰ UEPG unable to get responses from membership – suggested topic too complex.

Annex 1(A) Additional responses from other associations (companies)

Acronym	Name	Address	Phone/Fax	E-mail	Product Specifications	
					Products	Specifications or CEN/TC
EAA	European Aluminium Association	Ave de Broqueville 112, BE-1150 Brussels	Tel +4143 466 5586 Fax +4143 466 5584	luthiger@eaa.be	Windows, doors, roofs, cladding, structures etc	
	Dutch Cement & Beton Centre	Sint Teunislaan 1, 5231 BS 's-Hertogenbosch	(073) 640 13 12	pieterlanser@cementenbeton.nl		
	Swiss Association of Brick and Tile producers	Prüf-und Forschungsinstitut Sursee Leidenbergstr Postfach CH-6210 Sursee	Tel +41 41 925 7010 Fax +41 41 921 2172	info@pfsursee.ch www.pfsursee.ch	Clay bricks Clay roof tiles	EN 771-1 EN 1304
VIB	Association of Industrial Construction Raw Materials	POB 52, 6670 AB Zetten, The Netherlands	Tel +31 488 474444 Fax +31 488 474445	nieuwenhuys@sight.nl	Steel and Furnace slag, Phosphorus slag, Fly ash, Water minerals, Waste Incinerator Bottom Ash	Fly ash EN 14227 – 2, 3, 4, 14
Euratex	European Apparel and Textile Organisation	24, Rue Montoyer; Bte. 10 B-1000 Brussels	Tel +32 2 285 4880 Fax +32 2 230 6054	ECRA@euratex.org	Resilient, Textile and Laminate floor coverings	CEN/TC 134
Cellular Glass	Pittsburgh Corning Europe S.A./ N.V.	Lasne Business Park-Building F Chaussée de Louvain 431 – B-1380 Lasne	Tel +32 2 351 02 30 Fax +32 2 353 10 63	piet.vitse@pce.be	Thermal Insulation Cellular Glass	CEN/TC 88 EN 13167

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