

**Subject - BSI and Brexit**  
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International (ISO, EuroCodes (EN), EuroNorms (EN),  
British Standards (BS) Codes of Practice (CP),  
Publicly Available Specifications (PAS)

**1. UK Status**

The UK is in a Transition Period having left the EU on 31<sup>st</sup> January 2020. The Daily Telegraph editorial on 1<sup>st</sup> February was apt "*Clearly people aren't happy with the status quo. That is why they voted for Brexit. Therefore logic dictates that transforming the state is not just a nice idea but an essential part of the Brexit package and a political necessity.*"

The Prime Minister said on 3<sup>rd</sup> February 2020 "*There is no need for a free trade agreement to involve accepting EU rules on competition policy, subsidies, social protection, the environment, or anything similar any more than the EU should be obliged to accept UK rules.*"

Hence for our National Standards body (BSI) to perpetuate the UK accepting all European Standards and Norms without question, is not the will of the people.

The real question is one of choice:

- A. Should the UK follow the example of Canada, Australia and New Zealand and agree to accept all future CEN rule changes and endeavour to withdraw any conflicting National Standards in favour of those produced by the 34 countries as ENs?  
or
- B. Retain the right to adopt CEN EuroCodes and EuroNorms as considered necessary while having the ability to write our own UK product standards and codes of practice to suit our rules and likely trade requirements.

This briefing note has been prepared to urgently raise the issues that require to be debated now, and not left to discussion at the end of the Transition Period (31<sup>st</sup> December 2020).

**2. Briefing Conclusions**

- a) The construction industry should have a debate on the issues concerning standards. This should include topics such as; clarifying our views on the acceptance of the suite of ten EuroCodes; our obligations to adopt ALL future EuroNorms (ENs), re-introduction of UK Codes of Practice, and the future of Publicly Available Specifications (PAS)
- b) The industry must ensure that BSI does not sign the UK up to either full membership of CEN and thus obligate the UK into accepting ALL European Standards now and in the future, or to membership as a Companion Standardisation Body (CSB).
- c) Readers should urgently lobby the Government to ensure that the independent body for National Standards (BSI) does not sign away our right to complete our own Standards for industry and worldwide trade.

- d) There is a concept in government and in the BSI that standards are "voluntary" and do not necessarily need to be followed. Whereas this is the correct legal status of standards compared with rules, the idea that overseas trade can be carried out on the basis of non-compliance with a "voluntary standard" is naïve in an increasingly protectionist world..
- e) If the government wishes to pursue a Canada Style Free Trade agreement, do we actually understand how countries like Canada & Australia actually handle the CEN EuroCodes and EuroNorms?

### **3. History**

Peter Pallett has served for many years on the BS5975 code of practice committee for falsework (B514/26) and was heavily involved in updating the section on procedures for temporary works, published as BS5975:2019 in May 2019.

Throughout the three year Brexit debacle, Peter has been concerned that there has been NO debate or discussion in NCE or from ICE members on how we want to see the future of UK standards. None of his letters to NCE or the Daily Telegraph were published.

The B514/26 committee were concerned about Brexit and future standards, and requested a visit in 2018 by a senior BSI staff member to discuss the position. The meeting generated a heated discussion with nothing being resolved - BSI wanted the Status Quo. The BSI secretariat refused to publish anything about the discussions in the official BSI committee meeting minutes; hence the committee concerns remain totally unrecorded!

### **4. Current Situation**

Now that the UK has left the EU and is in the Transition Period, I fundamentally believe that as a sovereign nation we should have control over the standards and codes that we wish to adopt for controlling our industries and our worldwide trade.

Future trade with the EU should be no different from that with other countries, Canada, India, USA, China or Australia. If an industry wants to trade a product with a country, then that industry has to accept the National Standards adopted by the country - even though it might require different standards for each country with which it trades; for example using different electrical plugs and/or voltage.

I feel strongly that the UK should not agree to sign up to accepting every EuroCode and every EuroNorm in perpetuity, as prepared by 34 countries<sup>1</sup> in Europe. This would immediately make our products the same as all the other 34 countries and give us NO competitive advantage. The recent litigation brought by Dyson in not accepting the limiting EN standard for suction levels in cleaners was an example.

While there are advantages in having common design rules, as in the Core EuroCodes, the UK must retain the right to modify such rules to suit our processes and practice. At present members of CEN can participate in the Technical Bodies controlling the EuroCodes, but CSB members and Affiliates can only attend as observers!

Our National Standards organisation, BSI, should be able to write standards unhindered by 34 other countries, and should re-introduce Codes of Practice as separate documents as CPs for writing/maintaining and update our world renowned codes of good practice.

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<sup>1</sup> All EU plus Iceland, Norway, Switzerland, North Macedonia, Turkey and Serbia

## **5. The Current BSI position**

The BSI stated case at 4<sup>th</sup> February 2020 from their website is:-

*Following the UK's exit from the European Union on 31 January 2020, we have entered a transition period where the UK is no longer represented in the EU political institutions, but the rules and obligations of EU membership are still in effect. This will end on 31 December 2020 and during this period the British government intends to negotiate a trade agreement with the EU setting out our future trading relationship.*

*BSI's membership of CEN and CENELEC continues as normal with all its obligations and rights. This ensures continuity for our stakeholders in CEN and CENELEC committees and avoids the risk of challenge to our chairs and secretaries. As we have now left the EU, members of these organisations have set a timeframe to update the statutes to reflect the UK's departure from the EU. It is due to run until the end of December 2020 and the CEN and CENELEC Boards have proposed to extend it until the end of 2021*

*BSI's membership of the international standards organisations ISO and IEC is unaffected by the UK's exit from the EU.*

*We are positive that following the transition period, government practice in using voluntary standards to support regulation will not change. Where there is ambition in this or a future government to diverge from regulatory requirements in the EU or other countries, we will ensure that if industry standards are needed to underpin new laws, they represent international best practice.*

BSI and their stakeholders have throughout the Brexit debate expressed the opinion to sign up to **FULL** membership of CEN and CENELEC, either during or after the official Transition Period. It is noted that the very latest BSI statement does not refute that view. Signing up would oblige the UK National Standard organisation to accept every future EN, withdraw any conflicting standards, and agree not to plagiarise or copy any part of any EN in future work, for example explanations and formulae on how to use the EuroCodes in a Code or Practice would be forbidden.

According to BSI we would though have a place in the committee on the preparation of the ENs, but as anyone who has been involved in CEN work will testify, it is painstakingly slow, and few UK people have the commitment - the result as evidence by the scaffolding and falsework ENs are essentially that we now work in the UK to the German Standards!

The only apparent advantage of remaining a full member would be the ability to raise a formal objection to a bad standard, for example a safety-critical issue. Before Brexit this was done by the UK Government via the relevant European Commission working group; but as we no longer have a seat at that table, that route is denied - hence the advantage of full membership is removed!

Comment: It is not difficult to understand why the London based BSI group want the status quo. Their entire management centre and secretariat are geared to accepting and writing for Europe that the BSI rules and procedures for items such as UK Specifications or Codes of Practice have been overlooked in favour of co-operating with CEN.

Having to re-organise and introduce adoption committees, the writing of our own UK standards and codes of practice would take some time to formulate.

I note that the February 2020 BSI Brexit statement now refers to "*using voluntary standards to support regulation*". This highlights a lack of business awareness, has anybody from BSI, or government for that matter, actually tried to sell a product in Europe by quoting to your intended purchaser "*Our product doesn't conform to your EN, but as it's a voluntary code, it doesn't have to, and anyway, ours is better, believe me!*"

So the question is "Who decides what BSI should be doing?" - BSI, government or industry?

## **6. The Government Position**

Peter raised his concern about BSI and CEN membership with government via his local Lichfield MP, The Rt Hon. Michael Fabricant MP. The reply was from the Rt Hon. Kelly Tolhurst MP, Minister for Small Business, Consumers & Corporate Responsibility, and confirmed that she has the ministerial portfolio for Standardisation policy following the UK's exit from the EU.

This government reply (dated 17<sup>th</sup> January 2020) pointed out that BSI are an independent body and that BSI have made their public intention to continue membership of CEN & CENELEC very clear. The minister goes on to say "*The Government will of course be free to choose how they use standards at the end of the implementation Period when EU Regulation 1025, on European Standardisation, ceases to have legal effect*".

This implies that the Government will only take action after the Transition Period. This will be too late. The government also appear to have no control over how BSI acts! Surely the government can see that the UK wants to control its own rules and standards, not abrogate that responsibility to CEN and 34 other countries

My greatest fear is that BSI will sign up to full CEN membership and contractually oblige the UK to take on CEN rules in perpetuity!

## **7. Information on CEN and CENELEC**

CEN has currently 34No. member countries, 15No. Companion Standard Bodies and 3No. Affiliates, discussed below. At a plenary meeting last year CEN agreed that the EU should approve any harmonised standard work mentioned in the European Official Journal - hence CEN can no longer be said to be totally independent of the EU and Brussels.

**Full Membership** The CEN-CENELEC Guide 1 says for full members:-

- a) Article 5 obliges members to give every European Standard approved by CEN the status of a National Standard AND to withdraw any conflicting standard!
- b) Article 6 requires that if a member is prevented from implementing a European Standard by regulations or "*conditions outside its competence to alter then the member shall do everything in its power to bring about changes to allow implementation.*"
- c) Article 7 obliges members not to publish new or revised National Standards which are NOT completely in line with the European Standard!

**Companion Standardisation Body (CSB)** This is a slightly lower level of membership.

The equivalent CEN-CENELEC Guide 13 Clause 3.2 gives obligations as :-

- a) To comply with any future CEN rule changes, without any voting rights,
- b) To endeavour to withdraw any conflicting National Standards in favour of ENs.
- c) To endeavour to adopt all ENs developed by Technical Bodies
- d) To participate in an unlimited number of technical bodies as an observer.

It is a matter for others to consider how strictly "*to endeavour to xxxx*" obligation is accepted in the UK.

Countries included in the 15No CSB members are Jordan, Israel, Egypt, Canada, Australia and New Zealand. How would the UK be affected if we adopted a Canada style free trade agreement - does this mean the UK also becoming a CSB member?

## **Affiliation with CEN and CENELEC**

The equivalent CEN-CENELEC Guide 12 Clause 3.2 gives obligations as :-

- a) To comply with any future CEN rule changes, without any voting rights,
- b) To withdraw the National Standards conflicting with any European Standard adopted.

- c) To adopt ENs developed by Technical Bodies in which it participates as National Standards,
- d) To participate in technical bodies as an observer.

Countries formally recognized by the European Union as being potential candidates for EU membership can become a CEN Affiliate. Hence very limited participation,

Agreeing to CEN membership also means that the UK won't copy or reproduce CEN text without express approval. This gives the B514/26 committee a serious dilemma. In order to explain in detail how the EN on limit state design of falsework can be applied to UK temporary works structures, the CEN text needs to be extensively reproduced. Current BSI rules (April 2017) at Clause 10.1 require *"If the material to be repeated originates in a publication that is outside the jurisdiction of BSI, the necessary permission for its inclusion should be obtained and the material should be reproduced in full with appropriate copyright acknowledgement."* This means that the Code of Practice on how to use various EN formulae etc is going to be almost unreadable if obliged to reproduce EN sections in full!

The BSI must be given the freedom to write Codes of Practice on subjects without the necessity to continually obtain CEN approvals.

## **8. Background on current types of Standardisation Documents**

To understand how the UK should proceed after the Transition Period ends you need to be aware of the various types of documents that are involved, and their implications.

The documents discussed as follows cover International Standards (IS), EuroCodes (EN), EuroNorms (EN), British Standards (BS), British Codes of Practice (BS) and Publicly Available Specifications (PAS).

It has been made rather confusing by CEN by giving both the EuroCodes, essentially about design, and the EuroNorms essentially about product, the same prefix EN. The EuroNorms are about reducing barriers for trade, and are for manufacturers, testing houses, suppliers etc.. The audiences and users are different.

### **International Standards** (ISO)

International standards are written by members of ISO and IEC to establish worldwide standards. BSI membership of ISO and IEC is unaffected by Brexit.

### **EuroCodes** (EN 1990 to EN 1999)

The EuroCodes are a set of ten European Standards for the design of buildings and other civil engineering works.

The EuroCodes are drafted by Technical Committee 250 (TC250) of CEN, the European Committee for Standardisation. They have been created for the structural engineer and have to be included in the design and calculation process of buildings and all other types of structures. They refer to: geotechnical aspects, structural fire design, situations including earthquakes, execution, temporary structures and so on.

EuroCodes are written to ensure uniform levels of safety in construction in Europe.

- EN 1990: Basis of structural design (the head core)
- EN 1991: Actions on structures (10 individual parts)
- EN 1992: Design of concrete structures (4 parts)
- EN 1993: Design of steel structures (20 parts)
- EN 1994: Design of composite steel and concrete structures (3 parts)
- EN 1995: Design of timber structures (3 parts)

- EN 1996: Design of masonry structures (4 parts)
- EN 1997: Geotechnical design (2 parts)
- EN 1998: Design of structures for earthquake resistance (6 parts)
- EN 1999: Design of aluminium structures (5 parts)

These EuroCodes are the essential core of design using limit state design techniques. They do not include any methods for permissible stress design (working load principles). This may have safety implications on site as designers and site staff can use different terminology.

Countries are allowed to add both Nationally Determined Parameters (NDP) and National Annexes (NA) to the EuroCode to adjust the core document clauses for use in their particular country. For example the UK has its own map of UK wind for the British Isles including Northern island (but not Ireland).

The general feeling in the UK is that the EuroCodes are copious and not always easy to understand. The Europeans have a different approach to design, favouring detailed technical formulae and text in standards requiring understanding by experienced engineers through systems of "proof engineering consultants" for complex work; yet at the same time omitting design rules for the simpler work, relying on "custom and practice". For example in my own field of temporary works and falsework, in Europe there are NO design rules for falsework to concrete buildings where storey heights are less than 3.5m and slabs are less than 300mm thick i.e. 95% of all buildings! Whereas in the UK our own code of practice gives guidance on design and stability requirements for all falsework, big and small.

The other issue of the EuroCodes that gets little mention, is the use of varying factors in the Limit State design process, so that you rarely know what is the final factor of safety! The different EN material factors between the EuroCode, ENs and UK practice lead to a lowering of safety standards in temporary works. As an accredited Expert Witness I have experienced several litigations recently where all the court actually wanted to hear was my opinion on the likely factor of safety of the ensuing design! Hence the importance of the UK to be able to write its own codes of good practice to support and explain the use of EuroCodes to improve safety.

Whereas these EuroCodes are the basis of nearly all design work carried out in the UK, there are certain areas where UK deviations should be permitted. There are several examples where the EuroCode requirements have changed the accepted UK practice built up over many years, leading to ultra conservative, and more expensive designs, examples include tower crane base design, temporary excavation supports, use of timber in temporary works.

The UK must retain the right to write either write National Annexes on any EuroCodes it wishes to adopt, or publish its own documents broadly based on the EuroCodes.

### **EuroNorms (EN)**

These are standards that provides rules, guidelines or characteristics for activities or their results, for common and repeated use. Standards are created by bringing together all interested parties including manufacturers, users, consumers and regulators of a particular material, product, process or service. Where written by CEN or CENELEC they are regarded as a harmonised standards. . Manufacturers, other economic operators, or conformity assessment bodies can use such harmonised standards to demonstrate that products, services, or processes comply with relevant EU legislation. These standards have the disadvantage that all Europe will make the same, and can be said to dissuade innovation!

Those involving products are intended to increase product safety and quality as well as lower transaction costs and prices. These European Standards are a key component of the Single European Market. The standard represents a model specification, a technical solution against which a market can trade. It codifies best practice and is usually state of the art and are considered crucial in facilitating trade and hence have high visibility among manufacturers inside and outside Europe

In addition to the product standards, there are also subject related ENs prepared, for example on generic subjects, In temporary works these include ENs on temporary barriers, scaffolding, mobile towers, falsework etc..

The UK must retain the right to either adopt acceptable ENs and write our own suitable National Annexes or Forewords, or we could write our own BSs even if they conflict with published CEN material.

### **British Standards** (BS),

During the Transition Period the BSI are obliged to accept EVERY EN and republish them as a National Standard with prefix BS EN. There are also some standards that do not have equivalent ENs so are published directly as a BS.

### **British Codes of Practice** (BS in future CP?)

The UK has for many years been the source of good practice in subjects through its informative Codes of Practice. Known throughout the world they often became incorporated in local National Standards. It was a very sad day when the BSI took the retrograde step of stopping the CP series and naming all Codes of Practice as a BS. The only distinguishing mark now being in the document title as "Code of practice on xx". They remain an incredible resource of knowledge and good practice to be promoted for present and future generations.

BSI still have separate rules for writing such codes, but as the writer recently discovered, the BSI editorial staff are so geared to writing ENs and not upsetting CEN rules that writing informative helpful documents as Good Practice can prove to be very exhausting.

The UK must retain the right to generate Codes of Practice and explain how to use the various EuroCode documents as relevant - that must include the ability to quote text and formulae from ENs in order to justify safe use in the UK. How can you ever write a good practice document with phrasing such as "When using formula xx in EN xxxx don't forget to add in the xxx ? " but without being able to quote the formula!

After the Transition Period BSI should reinstate the practice of using CP numbers to identify our Codes of Practice.

### **Publicly Available Specifications** (PAS).

These documents are prepared by representative bodies who form committees and write a guide to be rapidly developed to fulfil an industry immediate need. Once published by BSI as a PAS they can, if considered successful be regarded for development into a BS.

For example in Temporary Works there is a PAS<sup>2</sup>, on "procedures for major infrastructure clients", on "finding utility services in the ground", "use of factors in TW design" etc..

The use of PAS is unaffected by Brexit.

### ***Statement***

This Briefing Note and the opinions expressed represent Peter's honest opinions on the matters to which they refer, based on his own knowledge, experience and understanding of the currently available documents. The views are not necessarily those of all engineers, but the intention by Peter Pallett is to inform the current debate on the future of UK standards.

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<sup>2</sup> PAS 8811:2017 Temporary works - Major infrastructure client procedures - code of practice  
PAS 8812:2016 Temporary works - Application of European Standards in design - Guide  
PAS 128:2014 Specification for underground utility detection, verification and location.