Convenor Report of CEN/TC 226/WG 2 “Horizontal roads signs”

Action: 26th plenary meeting of CEN/TC 226, item 7.2

Source: Emiliano Moreno, Convenor

Comments:
GENERAL

Since the last meeting of TC226 (Vienna, 12/13 June 2014), WG2 has met in two occasions (Madrid (extraordinary meeting): 5/7.11.2014; and Prague: 1/13.03.2015) and, in addition, it has been deploying their main activities throughout the work being carried out by the different Task Groups (TG) and Expert Panels (EP) on the so named “extended work program” as well as:

a) Continuing drafting the still pending Harmonized European Standards (prEN 1424 “Premix glass beads” and prEN 1463-3 “Active Road Studs”);
b) Revising the European Standards which last version was published 5, or more, years ago (EN 1871:2000 “Physical properties”; EN 1436:2007+A1:2008 “Road marking performance for road users”; HEN 1463-1:2009 “Retro-reflecting road studs-Part 1 Initial performance requirements”, and consequently Part 2 “Road test performance specifications”;
c) And preparing the prEN 1871 “position map” as per the commitment reached at the mentioned plenary TC226 meeting in Vienna.

- It shall be noted that since the last meeting of TC226, the situation with regard to prEN 1790 “Preformed road markings” has not changed: i.e. although this Harmonized European Standard has been already published by CEN, its reference (and Co-existence Period) has not been yet cited in the OJEU despite the fact that WG2 has provided, in time, all explanations and justifications (about the “classes” mentioned in the standard) requested by the European Commission (EC). We hope, based upon the information provided by CEN (Mr. Goncalo Ascensao) that we could expect within this year the corresponding “Delegated Act” of the EC authorizing those classes and the subsequent publication (of the reference) in the OJEU. 

- For the Harmonized European Standard prEN 1871 “Paint, thermoplastic and cold plastic materials - Specifications”, as previously commented, the group has been working (according to the “mandate” received from TC226 at the last meeting in Vienna -12/13 June 2014-, below attached: please, refer to the text outlined in yellow), firstly in a specific meeting (Madrid, 5/7 November 2014) and secondly by correspondence, in preparing the requested “position map”. In order to be able to prepare it, a questionnaire was agreed upon and circulated within the members of WG2; annexed to this report, you can find the two slides summarizing the output obtained from the different answers provided by the WG2 experts; and in separate files, the complete analysis of the answers collected and the resulting “Positioning Map” have been also provided.

2) Assuming that the general feeling is that the EC is going to react by “saying NO" to the above mentioned topics, an extra WG 2 meeting will be organized in Madrid (2014-11-05 to 07). The meeting objective is to prepare a type of Excel-position map with the opinion of each of the WG 2 experts about the fundamental issues (CE-marking, products vs. assemblies, essential requirements, etc.) argued to disapprove prEN 1871 and to determine if the rules are adapted to the situation. That meeting is not intended for adopting any decision to be proposed to TC 226 but just to reflect the different positions and, by knowing that, perhaps there will be valuable information that may help TC 226, CEN and the EC itself to decide "what next" (keeping in mind, as previously commented that the disagreement is not of technical nature).

Now, taking into consideration the situation reflected by the WG2 internal consultation as well as the resulting “Position Map” (please, refer to the above mentioned Annexes), and keeping in mind the decision BT 12. BT/TCMG, we (in WG2) are expecting a final proposal (from TC226) on how to proceed: What next?
### STATUS REPORT CONCERNING THE SITUATION OF THE ACTIVITIES CARRIED OUT BY WG2 IN 2014/2015

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<tr>
<th>REFERENCE</th>
<th>FIELD OF APPLICATION</th>
<th>SITUATION</th>
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| **TG1 & EP3** | **TG1**: Road marking performance (EN 1436).  
**EP3**: Mobile measurements.  
(Kai Sorensen) | TG1 and EP3 was formed as a single group in the autumn of 2012 and held its first meeting on 3 October 2013. It was decided to address the preliminary Work Item - Test methods for measuring road marking performance with vehicle mounted equipment (refer to CEN/TC 226 Resolution 349 (Berlin – 11/2009)) in a revision of EN 1436: 2007+A1 "Road marking materials - Road marking performance for road users" taking other needs for addition and revision into account as well.  

The group considered a draft revision at a second meeting on 20 March 2013, where a procedure for the completion of the revision was agreed. This procedure includes measurements of the chromaticity of retro-reflected light for a collection of yellow tapes and arrangement of a second round robin test of vehicle mounted retro-reflectometers to be carried out in Italy in the Autumn. The progress was considered at a third meeting on 2 April 2014 together with various comments/observations.  

The consideration of inclusion of colours other than white and yellow has identified that there is considerable variations in the specification of colours (including levels of saturation). Therefore, these additional colours will not be included at this time, but the TG investigate suitable colour boxes.  

The report of the above-mentioned round robin test and additional comments/observations were considered at a fourth meeting on 11 March 2015.  

After the meeting, a consultation within the task group has been carried out followed (in parallel) by an internal enquiry within the WG2 aiming at agreement, if possible, to have the prEN 1436 rev available for TC226 endorsement by the end of 2015.  

Nevertheless, the volume of comments received is large, and some of them are difficult to deal with. Therefore it is now obvious that consultation with the TG1/EP3 is necessary and, in consequence, it will not be possible to send the prEN 1436 rev for consideration at the CEN/TC 226 meeting in Berlin.  

In addition, it was agreed that the EP3 test report on “Mobile measurements” (from September 2014) should be distributed to the WG via CEN-Livelink, including a sentence that it is a working document and not to distribute it wider. Publication should only be considered if reviewed and agreed by the EP. |
| **TG2** | **EN 1871:2000.** Paint, thermoplastic and cold plastic materials - Specifications.  
**EN 12802:2011.** Laboratory methods for identification.  
**EN 13459:2011.** Sampling from storage and testing.  
(Richard Hughes) | The European Standard’s 5 year review has been delayed by activity to attempt to bring the standard to harmonised status. As this is stalled, TG2 will start the revision of EN 1871:2000 (i.e. without Annex ZA) on the 5 year rule.  

**EN 12802: 2011** “Laboratory methods for identification” will also be reviewed. Experiences from users of the standard have highlighted some improvements and updating required.  

**EN13459:2011** “Sampling from storage and testing” is also in the scope of the TG2. Any requirements to update this standard will also be considered although none to date are highlighted.  

In order to start off with these revision works, two meetings are planned in 2015. First meeting of TG2 in Brussels 23 April 2015. Follow up meeting October 2015. |
**TC 226/WG 2: ANNUAL REPORT OF ACTIVITIES (Berlin, 11/12 June 2015)**

**11.05.2015**

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<td></td>
<td>TGG3 is being reconvened, after quite a few years of inactivity. Amendments to HEN 1463 - Parts 1 and 2 (“supporting European Standard”), as part of the compulsory CEN requested 5 year review, will be completed by the TG in time for approval at the next meeting of WG2 (Lisbon, 14/15 April 2016). In particular, the revision of HEN 1463-1:2009 requests the adaptation of Clause 6 “Evaluation of Conformity” (now, in accordance to the CPR “Assessment and Verification of Constancy of Performance”) and of its Annex ZA to the CPR.</td>
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| **prHEN 1463-3 “Active Road Studs”.** The preparation of this Harmonized European Standard is being coordinated by Mr. Kai Sorensen. |
|---------|-----------------------------------------------------------------|
|         | At the last WG2 meeting, it was agreed upon, in the revision of draf prHEN 1463-3 already available, to remove examples and confirm no optical performance level in Annex ZA, only method of measurement. It should be also consider the removal of physical characteristics within this standard and to make a reference to the identical characteristics in Part 1. If not earlier, and after approval (by correspondence) in WG2, prEN 1463-3 should be available for TC226 endorsement by the end of 2015. In fact, the last available draft (dated, 25 April 2015) was circulated in WG2, for approval, on April 27th (deadline for answers: 22 May 2015). |

<table>
<thead>
<tr>
<th><strong>TG5</strong></th>
<th><strong>HEN 1423:2012. Drop on materials - Glass beads, antiskid aggregates and mixtures of the two. prHEN 1424. Premix glass beads.</strong></th>
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<td>In practical terms, the activity of this TG has been limited to finalization of the standardization work on prHEN 1424 “Premix glass beads”.</td>
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To this respect, the TG met three times in order to reach consensus mainly on the comments provided by the German experts about the definition of Granulometry for Premix glass beads. At the very end, the new version of prHEN 1424 (with the same classes as in HEN 1423 and appropriate modifications in Annex ZA and Clause 6 -to accommodate them to the CPR rules) has been just circulated for comments and approval, if possible, to the members of the TG and to the experts of WG2. Although the new revised draft should be available for TC226 endorsement by the end of 2015, it is our intention to comply with this goal not later than September 2015 (provided that the assessment of the assigned CEN Consultant is provided). Unfortunately, it has been impossible (in spite of the efforts made by the TG) to circulate it in time for discussion -and decision (endorsement, deadline for endorsement, etc.-) at the meeting of TC226 in Berlin (11/12 June 2015). |

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<thead>
<tr>
<th><strong>EP1</strong></th>
<th><strong>Dangerous Substances</strong></th>
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<td>A new liaison officer: Dr. Markku Oila (Finland) will be in charge of this responsibility, on behalf of WG2.</td>
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<tr>
<th><strong>EP4</strong></th>
<th><strong>Road marking (including road studs) removal, masking and covering.</strong></th>
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<td>The draft CEN Technical Report has been already sent for endorsement, by TC226, in order to be dispatched to UAP for publication as soon as possible.</td>
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<thead>
<tr>
<th><strong>EP5</strong></th>
<th><strong>Test methods and requirements for (positive and negative) noise and vibration produced by structured road markings.</strong> <em>(Luc Goubert)</em></th>
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<td>Works are progressing adequately.</td>
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<th><strong>EP6</strong></th>
<th><strong>Impact of road marking on road safety.</strong> <em>(Matthew Youel)</em></th>
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<td>The intention for 2014/15 was to identify what data was available across Europe on the safety performance of the renewal and improvement of road markings and road studs. In a few countries road schemes of various sizes are monitored to compare the safety performance of the section of highway before and after the works were undertaken. This assessment varies, with accidents assessed for period between 1 and 5 years. Schemes are categorised as to what elements are included in the work road marking, traffic signals, resurfacing etc. It is then possible to determine what type of improvement work give the best results, both in terms of reduction in injuries as well as the cost effectiveness of the activities.</td>
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From the available data the benefit of improving road markings was high; unfortunately the limited amount of data available means that it is not possible to be confident that the results would reflect a Europe wide trend. Requests on available data from countries indicating a wish to participate did not result in any significant contribution. The conclusion was that mirror bodies did not always have access to this data and that looking to CEDR in 2015 may be more productive.

In parallel to this deterministic tests by various European and nations bodies has been looking at deterministic performance of road markings in wet and rainy conditions and also the performance requirements of road markings and studs for the reliable use of in-vehicle technology for lane keeping and sign recognition. The potential impact of this latter issue on road users not using in-vehicle technology does not seem to have been fully assessed and may need to be considered as a priority for 2015/16.

**TG6**  
**EN 1824:2011. Road Trials.** (Pierre Derommelaere)

The current version of EN1824 was published in 2011 and has been put in place for a number of test campaigns now. After several years of sleep consecutive to the publication of the standard, the TG reconvened in November 2014 for a preliminary meeting. It shall be stated that the number of experts interested in the works of the group is so far encouraging.

As a first observation, we can note that the participants agree on the fact that the current version of the standard is satisfactory and does not cause major problems. In any case, this meeting allowed the group to see that several parts of the standard leave room for small differences between different countries’ roadsites. Although these differences do not seem to be problematic, it may be interesting to summarize the practices in place in the different countries.

In general, it would be of great interest to keep the TG active in order to gather regularly the road trials users and facilitate exchanges amongst countries. This will definitely help experts sharing good practices, and could allow having a better understanding regarding WG2 matters. The work done will help the group being ready for the time when a revision of the standard will be necessary (in 2016). The next meeting should be held in Paris on 8th and 9th June.

- Finally, it shall be also commented that WG2 is in the process of exchanging comments (being coordinated by Dr. Gauthier Michaux) with the European Commission with regard to the (voluntary) Regulation being drafted on Green Public Procurement (in the field of paints and varnishes) as it includes “traffic paints”. For the moment, since our WG2 meeting in Prague, there is no new document to discuss on it. We know that, right now, the experts of the European Commission in charge of the preparation of this document are trying to collect information from the national road authorities about the (national) procurement practices on tenders about road markings. Once the next draft GPP document were available, it will be circulated within the different stakeholders which are including WG2.

- Next meeting of WG2 will take place in Lisbon, on 14/15 April 2016.
Summary “Slide 1”:

There are 33 CEN Member States and 28 EU Member States. The questionnaire was sent to 19 countries out of which 15 countries responded. After analyzing the responses, we conclude the following:

- 4 countries did not propose any further steps,
- 2 countries expressed desire for harmonized standard based on FprEN1871
- 2 countries expressed desire for harmonized standard (without further specification)
- 1 country (most likely) prefers exiting national system
- 1 country proposes to postpone any decision and should a harmonized standard be developed than only with System 1+
- 5 countries do not support harmonized standard
Summary “Slide 2”:

There are 33 CEN Member States and 28 EU Member States. The questionnaire was sent to 19 countries out of which 15 countries responded. Additional questions were added to the questionnaire. After analyzing the responses, we conclude the following:

- 7 countries do not support CE marking in this area
- 2 countries require change in Mandate in order to proceed with hEN
- 1 country suggests to keep the existing Mandate but also keep current status quo for next 10 years
- 1 country expressed desire for harmonized standard based on existing Mandate
- 2 countries expressed desire for harmonized standard (without further specification)
- 2 countries did not propose any further steps

Including responses to additional questions,
*Do you want a CE marking?*
*If yes do you want it based on the existing Mandate?*
*If yes, do you want it based on a new Mandate?*

- 1 hEN without change in Mandate
- 1 hEN with change in Mandate
- 7 keep status quo for 10 years
- 2 no hEN
- 4 no proposal
- 2 no response
- 14 CEN Member States - 28 EU Member States - 33
aim>

- understand current status of regulatory requirements

- outlook for the future / Road Map

proposals to questionnaire collected between November 11 and December 15, 2014

distributed to 19 representatives of CEN member states received 15 responses
Comments to the responses>

- diversity in requirements, expectations and understanding of the road marking industry within the responding countries

- ambiguity between various terms and requirements e.g.:
  - requirement of approval of road marking material, yet tested on road marking assembly
  - road marking assembly as a subject of national approval, yet a mandatory applicant for the approval is road marking material manufacturer
  - list of performance requirements do not match list of test methods or standards in many cases irrelevant to those characteristics

- only final product (i.e. road marking) relevant vs. complex regulation of every component

- complex testing and chemical analysis vs. simple testing of the final product, i.e. road marking or some simplification of testing chemical properties of road marking materials

- “identification” and “durability” as a specific issues

- market surveillance either not understood or EC regulation not followed
1.- Does any type of regulation in the area of road marking (material, drop on, road marking, road marking application, equipment, personnel etc.), exist in your country?

Compulsory request for e.g.:
- Certification
- Type approval
- National quality mark
- Other

Please describe

Type approval CE according ETA
Certification
Road marking approval
Other
Nothing

CE marking, based on ETA
"certification"
other
road marking approval
4
6 (5)
2.- Subject of approval e.g.:

- Road marking material (paint, plastic, thermoplastic)
- Road marking assembly (road marking material + drop on material)
- Road marking application (work)
- Application equipment
- Other

Please describe
Proposal

questions 1 + 2

Total responses – 15

- 4 countries for hEN, 2 of which based on existing FprEN 1871
- 4 countries no proposal out of which 2 countries without national regulation for approval
- 2 countries propose to stop working on harmonized standard
- 5 countries do not see any benefit in hEN
  - 2 countries continue with national requirements
  - 2 countries simple non harmonized standard
  - 1 country: complex standard covering all

2 + 2 + 1

2
3.- Applicant for approval e.g.:
- Road marking material manufacturer
- Contractor
- Third party (independent dealer)
- Importer

Other – please describe
Proposal

question 3

4 countries proposing road marking material manufacturers as an applicant
4. Performance requirements.
Please list all characteristics that are subject of assessment and their performance levels (min. values etc.) including testing sequence or frequency if specifically required. (e.g. before and after winter period, 3x per year, before and after application on road, etc.)

5. Test methods.
Please refer to a test methods used for characteristics listed in question 4 including description of test conditions and information gathered during testing (e.g. climate conditions, road surface texture / roughness / structure / type, type of winter maintenance, etc.)
Proposal

questions 4 + 5

Total responses – 15

3 countries proposed EN 1871 as a reference standard for performance characteristic and test methods, two of which referred to harmonized version of the standard.

5 countries without proposal

5 countries proposing existing national systems mostly based on EN 1436

1 country proposes non-harmonized EN standard without further specification

1 country proposes road trial tests as a reference method for durability
6.- Please describe procedural steps for Attestation of Conformity.
List all actors involved (e.g. applicant, manufacturer, contractor, test laboratory, certification body, regulator) and describe their role and tasks.

7.- If FPC is a part of Attestation of Conformity, please describe requirements of FPC (e.g. ISO requirements, testing requirements – tests/frequency, third party interventions, etc.)
8.- Please describe how “Identification” is dealt with during the process of initial assessment as well as periodic FPC (if required).
Proposal

questions 6 + 7 + 8

Total responses – 15

2 countries stated requirement for CE marking, one referring to existing FprEN 1871 and EN 1436, the other one specifically mentioning requirement for AVCP System 1.

2 other countries specified AVCP system 1 requirement.

5 countries without proposal

2 countries renouncing CE marking

2 countries referred to a non harmonized EN as a sufficient guidelines

1 country referring to its national system (more strict than AVCP 1+)

1 country requiring AVCP 1+ should hEN exist
9.- Please describe quality control executed in the framework of the installation contract or delivery contracts. (e.g. procurement control, product identification, control during application)

Please include description of procedures in case of non-conforming products (if given by general regulation e.g. financial or other penalties).
Proposal

question 9

Total responses – 15

8 countries without proposal

2 countries renouncing CE marking

2 countries referred to their national system

1 country stated that this should not form part of hEN 1871

1 country requiring to EN 13212 and ISO 9001

1 country would appreciate guidelines but not in the form of a standard
10.- Please describe market surveillance procedure conducted by national market surveillance body according to EC regulation n 765/2008. (e.g. subject of surveillance (dealer, contractor, manufacturer), picking product samples from the market, testing, identification, etc.)
Proposal

question 10

Total responses – 15

2 countries referring to AVCP systems for guidelines. One referring to System 1, the other to System 1+

3 countries referring to their national system one of which mentioning applicable EC regulation

5 countries without proposal

1 + 1

2 + 1

10
11.- Please describe if you take during the assessment procedure into account social responsibilities of actors involved (safety / road safety issues, healthcare issues, etc.)
12. If subject of the assessment, please indicate what are the specified roles of each actor in the road marking works? (e.g. regulator, client, contractor, manufacturer, importer / exporter)
Proposal

question 11

existing national system

No response

question 12

only one country referred to its national system
There are 33 CEN Member States and 28 EU Member States. The questionnaire was sent to 19 countries out of which 15 countries responded. After analyzing the responses, we conclude the following:

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- 1 country proposes to postpone any decision and should a harmonized standard be developed than only with System 1+
- 5 countries do not support harmonized standard
### CE-Marking: YES

Based upon M/111: e.g. based upon the "Essential Characteristics" of the products (i.e. physical properties) and not on the "road marking performance" (as it is the current version); and/or including "Identification"; and/or increasing the level of AVCP System.

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<th>Country</th>
<th>Date</th>
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<tbody>
<tr>
<td>Spain</td>
<td>6.05.2015</td>
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<td>United Kingdom</td>
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<td>Poland</td>
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<td>Italy</td>
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### CE-Marking: NO

"NOT HAVING ANSWERED THE QUESTION ON CE-MARKING (YES/NO)"

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### Without further delay

"status quo" of 10 years (considered the time needed to get more experience and analysis prior to publication of this specific Harmonized European Standard)

### NOTE 1 (for clarification): "At the time closing this report, the position of countries outlined in ORANGE color has not been assessed by the corresponding WG2 delegates. Nevertheless, they have been placed on to the Map based upon the information collected during the WG2 CE-marking/prEN 1871 consultation carried in 2014; to that respect, the text given in brackets at the moment is also a simplification (made by our colleague Martin Toth) of the answers given to the mentioned WG2 internal consultation".

### NOTE 2 (for clarification): "The dark GREEN color used to outline some boxes, and the attached date (there in) is intended to indicate that the WG2 member assessed the information, and the date of issuing that assessment".